The development of higher and further education in Sunderland since 1908

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THE DEVELOPMENT OF HIGHER AND FURTHER EDUCATION IN SUNDERLAND SINCE 1908.

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The purpose of this survey is to describe the development of higher and further education in Sunderland since 1908 and is therefore chiefly concerned with the development of the Technical College and to a lesser extent, the College of Education and the College of Art.

1908 marked the end of the first phase of the Technical College's development because in that year, by the provisions of the University of Durham Act, it was granted conditional permission for affiliation. This year also saw the establishment of a separate Day Training College instead of a Department of Education of the Technical College.

The survey ends in 1969 with the re-combining of the Art and Technical Colleges to form the Sunderland Polytechnic and the College of Education receiving its own Instrument and Articles of Government.

The way in which a Technical College specialises and develops often depends upon the area in which it is situated and whose industries it serves. Likewise, the amount of

financial assistance it receives depends upon the economic health of the hinterland. For this reason, Chapter 1 is devoted to the economic history of Sunderland, whilst Chapter 2 is concerned with the dominant industry of the town, namely shipbuilding.

The third chapter briefly traces the development of further education in Sunderland from 1825, when the first Mechanics' Institute was founded, through the early history of the School of Science and Art, from which all forms of higher education in Sunderland can claim descent, to 1908 when they all went their separate ways.

The general development of teacher training in England and Wales is given in Chapter 4, whilst Chapters 5 and 6 describe in detail, the development of teacher training in Sunderland. The Day Training College in Sunderland, in its early days, aroused much local political controversy, as described in Chapter 5, whilst Chapter 6 shows how it grew from a small college to become the largest College of Education within the Durham Institute of Education.

The growth from a small School of Art to being a constituent College of Art and Design within the Sunderland Polytechnic is described in Chapter 7.

The way in which further education in general and technical education in particular has developed nationally

is described in Chapter 8, whilst the next four chapters are concerned with its provision in Sunderland. Chapter 9 deals with the Technical College during the years 1908 to 1919, and Chapter 10 with the struggle between the Wars, to gain affiliation to the University of Durham for the Engineering Department, and recognition of the Pharmacy Department by the University of London. Chapter 11 begins with the fine work done during the World War II, and then describes the growth of the Technical College as a result of the help given on a national level after 1956. The Technical College is then divided into three Colleges, the Monkwearmouth College of Further Education and the West Park College of Further Education enabling the parent college to aim for C.A.T. status.

The final chapter is concerned with events after the publishing of the Robbins Report, and ends with some conclusions.

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CONTENTS.

Chapter 1

A Brief History of the Growth and Economic Background of Sunderland.

Today Sunderland is the largest and most important town, port and industrial centre in the County of Durham. Although proud of its educational facilities, namely, 71 Primary schools, 34 Secondary schools, a College of Education, 2 Colleges of Further Education and a Polytechnical College, prior to 1969 when the Polytechnic was designated, it felt discontented because university and advanced technology status had passed her by. This chapter sets out to give a brief historical and geographical description of the social environment of this educational achievement, because the provision of higher and further education can only be fully understood in the light of Sunderland's past history and against the background of social change. Since Sunderland claims, with every proof, to be the largest shipbuilding town in the world, or 'The Place Where Ships are Born' the growth of this industry is described in the next chapter.

The town of Sunderland is made up of the ancient settlements of Monkwearmouth, Bishopwearmouth and Sunderland; the parishes of Southwick and Fulwell were added in 1927;

parts of Ford, Herrington, Silksworth and Hylton were added in 1950 and the remainder in 1967 when Offerton, Ryhope, Tunstall and Whitburn Bents were also included in the Borough. It has a population of almost 220,000, and is the second largest town in the North East. Within 12 miles there are just under 1½ million people and a further million live within 25 miles of the town. Sunderland is well placed as a port for the shipment of goods to and from north west Europe, particularly Holland, Germany and Scandinavia. It is also a seaside resort which attracts thousands of visitors every day during the summer and provides amenities for residents of the town which are matched in very few industrial centres elsewhere.

The County Borough of Sunderland lies astride the mouth of the river Wear on the east coast of Durham and it is underlain by a bed of magnesian limestone deposited by the sea which covered the region some 200 million years ago. This limestone overlay rises in a more or less gentle slope under its blanket of glacial drift from the coast to a western escarpment about 500 feet above sea level. Most of the land within the boundary is of low altitude, from 100 to 200 feet above sea level, above which the knolls of Humbledon and Tunstall rise prominently to about 300 feet. It is this limestone and its boulder clay which gives this region its magnificent coastline of sandy bays and cliffs. Beneath the

magnesium limestone are the carboniferous coal measures which extend far out to sea and it is upon these coal bearing rocks that much of the industrial and urban growth of the town has depended.

The development of Sunderland was due to its position at the mouth of the river Wear, which breaches the magnesian limestone to provide the only natural harbour and point of entry along the cliffs extending north to the Tyne and south to Hartlepool. The first immigrants arrived either by this Wear inlet from the east coast route or by the high dry land routes from the south to settle in the vicinity of the present town. Evidence of settlement has been traced back to 6,000 years before the birth of Christ, through mesolithic flints and a large neolithic burial ground at Copt Hill. The greatest number of archaeological finds date back to the Bronze Age. Very early relics from about 1,800 B.C. have been found on most of the hills around Sunderland, for example at Hastings Hill and at Humbledon, and two Bronze Age swords and a dug-out canoe were discovered on the banks of the Wear at Hylton, where there was a ford from very early times. Finds from the Roman era have been confined to only a few small articles because the Roman road north to Newcastle lay several miles inland thus by-passing the settlement at the mouth of the

river Wear which was therefore not profoundly affected by Roman influence. The first recorded mention of what is now the County Borough appears in the work of the Venerable Bede, who, in his 'History of the Abbots of Wearmouth' describes the building, in A.D.674, of a monastery at Monkwearmouth on the north bank of the river Wear, by the Benedict Biscop. Parts of the building still remain as St. Peter's Church. In 686 A.D. Biscop obtained from the King of Northumbria three hides of land near the mouth and on the south bank of the river. This was known as Sunderland since it was separated or sundered from the lands of the monastery on the other side of the river. It was due to the work of Bede and Biscop, later joined by Ceolfrid, that Wearmouth became a seat of culture and learning recognised and esteemed by every similar monastic establishment in Europe. So widespread did the repute of Wearmouth become, not only on the line of pure scholarship, but also as a kind of clearing house for the transcription of important manuscripts, that other monasteries, it is said, sent their documents to Wearmouth to be transcribed. Thus the monastery of St. Peter had become famous for its scholarship and learning centuries before Cambridge, Oxford or Durham had been founded. Biscop also gave distinction to Sunderland in yet other ways. He brought artificers in glass from Gaul and

Italy to assist him in making St. Peter's a church almost unique in the British Isles, and that introduction was the initial step to the manufacture of glass in Sunderland and in England. During the 7th. and 8th. centuries these monastic communities flourished and encouraged the growth of a small fishing industry, using the favourable shipping and harbour facilities of the southern shore of the Wear. Unfortunately, this period of prosperity was short lived because during the 8th. and 9th.centuries, the Wear settlement suffered a similar fate to other places on the coast exposed to the Danish raiders and these attacks began a period of decay in which the importance of the monastery declined and trade stagnated.

During the 10th. century, the growth of a third settlement which became known as Bishopwearmouth (because it was founded on land granted to the Bishop of Durham in A.D.930 by King Atholstan) revitalized the area. Bishopwearmouth, on the south bank, became the chief settlement in the Middle Ages and re-established the trading facilities of the Wear which, until 1200, was the only port of the Bishopric. This initial advantage of monopoly expanded its trade, especially in salt and fish that were essential to the mediaeval economy. But again prosperity was not long lasting. A number of setbacks occurred, including the restrictions

caused by the wars between William the Conqueror and the northern earls; the Bishop's acquisition of Hartlepool in 1200 which robbed the Wear of its monopoly; and a severe attack of the plague. Thus, the period between the 8th. and 12th. centuries ended in general stagnation for the communities at the mouth of the Wear, although it was during the early 12th century that the maritime imortance of the three townships of Bishopwearmouth, Monkwearmouth and Sunderland-near-the-sea was at last acknowledged. Bishop Pudsey, one of the most powerful occupants of the episcopal throne, sponsor of the Boldon Buke in 1183, granted his famous charter to the three townships and this is practically the first reference to the port of Sunderland as a place of maritime commerce. In this charter, he gave borough status to the three settlements under the name of Wearmouth. The progress of the salt industry at this time provided the basis for the future growth of the settlements. Alongside the trade in salt grew the need for ships and the first mention of shipbuilding was recorded in 1346 when Thomas Menville occupied a certain place at Sunderland called Hendon for the building of ships. (1) It was also the salt industry's need for power , following the exhaustion of wood supplies, that encouraged the production and use of coal on the Wear. Thus

initiated, the coal mining industry grew rapidly, soon providing amounts in excess of local needs and sufficient to allow a small coal exporting trade which began in 1396. The 14th. century therefore heralded the development of Wearmouth as a coal trading and shipbuilding centre and these industries, together with an increasing trade in the export of sea coal, grindstones, rubstones and whetstones, provided the basis for the continued growth of Wearmouth during the 15th. and 16th. centuries.

Prospects of employment attracted immigrants and at the turn of the 17th. century there was a considerable influx of settlers plus several foreign merchants, but the jealously organised power of the Newcastle hostmen in the coal trade, together with the less favourable conditions for shipment than those existing on the Tyne, prevented any increased trade from the Wear before the middle of the 17th.century. Then it was this strict control of the Tyneside hostmen which spurred on coal production in the Wear district, for although by a charter of 1600, the Newcastle hostmen gained monopoly of the coal trade in the Tyne region itself, they were still unable to undermine the competition of the Wear,and their policy of regulating supply to keep prices high, actually encouraged development on the Wear, where restrictions were

not imposed. As the amounts of coal passing through the Wear increased so did the importance of the town and this was recognised in 1634 by Bishop Morton who granted a new charter to Wearmouth which was renamed the Borough of Sunderland.

The town of Sunderland without question owes its commercial importance to two main sources - coal and the River Wear with its facilities for shipbuilding and shipping. Coal mining in the Wear basin at first was under severe geographical handicaps compared to that of the Tyne. The limestone overlay on the coal measures meant that the nearest mine, workable by 17th. century methods, was ten miles up-stream whilst the lower Wear was narrow, flowed through a gorge, was smaller and more difficult to navigate. As the demand for coal increased from the south-east, where timber was becoming scarce, the shallow pits of the Tyne valley became exhausted. The Civil War period then gave great opportunities to Sunderland, for Newcastle adhered to the King, whilst Sunderland, mainly through the influence of John Lilburne (1614 - 57, a supporter of Cromwell, known as Free-born John) favoured the Parliamentary side. Thus the embargo, by the City of London on coal from Newcastle enabled Sunderland to expand her coal trade considerably. From 11,000

tons in 1609, it had risen to 70,000 tons by 1634, reaching 175,000 tons a year by 1710 and passing the million tons in 1825. The 19th. century saw the coal trade really flourish until in 1904 the maximum of over 5 million tons was exported. One of the advantages Sunderland possessed was of course, the mining of coal within her boundaries. This was done at Wearmouth Colliery which made mining history by sinking a shaft to the Bensham seam,5ft.8ins. thick, at a depth of 167 fathoms on the 15th. February,1834 and to the Hulton seam, 4ft.8ins. thick, at a depth of 286 fathoms (1716 ft.) on 4th.April,1846(2) At the time, this was the deepest mine in the world, is still one of Britain's top priority pits and, following a £6 million reconstruction scheme, is geared to produce more than a million saleable tons of coal a year.

Railway construction also aided the coal trade and made this expansion possible. Previous to the railway age, the difficulty and cost of transporting coal to the staiths severely limited the hinterland; distances greater than two miles produced prohibitive costs. The 19th. century saw the exploitation of the Durham coalfield to the full. The Hetton Wagonway and the Durham and Sunderland Railway of 1836 strengthened the connections of Sunderland with its developing hinterland. Although this period saw an expansion in the trade

of the Tyne and the development of new ports such as Seaham Harbour, Sunderland was unchallenged. From a study of the records, it can be seen that from 1875 over 3 million tons of coal per year were exported and this increased to well over 4 million tons until the outbreak of War in 1914. Between the wars, in spite of the depression and slump in world trade, this figure oscillated between 3 and 5 million tons. Since 1945, the coal trade has gradually declined each year until 1967 when under 2 million tons were exported. This fall in exports can be explained by the relative decline in the use of coal in the country as a whole, increased competition from overseas, natural gas, North Sea gas and oil. Future prospects, however are not too bleak because Wearmouth Colliery has been modernised and recent off-shore borings have proved the existence of 550 million tons of workable coals off the Durham coast. Sunderland lies near the heart of this rich coastal coal belt which should provide the foundation for the future prosperity of the country's mining industry. Markets for this coal exist in the gas and electricity industries of the south and in addition, Coal Products Division of the National Coal Board operate six coking plants in County Durham, including Lambton and Hawthorn, which are both near the town. They produce high-grade coke and have gas,benzole

and tar as by-products. Perhaps 1968 saw an end to the decline in the coal trade because more than 2 million tons was again exported, the first upward trend since 1892.

This boom in the coal trade stimulated the shipbuilding industry (dealt with in Chapter 2) but suffice it to say for the moment that by 1817 the industry returned the highest production figures in the United Kingdom and in the 1819 records of Lloyds register it states: "The Wear shipbuilding business in the port stand the highest of any in the United Kingdom, and gives employment to a great number of carpenters." The first of the five major shipyards at present operating, was established in 1793, the remainder between 1826 and 1846. Engineering was also becoming important as sail was superseded by steam; the first iron ship was launched at Sunderland in 1852 and in 1854 George Clark built his first marine engine. Marine engineering is still important; the Doxford opposed piston engine is the largest marine engine, generating over 20,000 b.h.p., manufactured in Britain today. (3) It has been installed in nearly 2,000 ships and is required for several ships under construction at present.

The flourishing coal and shipbuilding trades led to a further important stage in the development of Sunderland, by attracting other industrial undertakings to the ready source

of power and transport. Although glassware was probably made on the site of the monastery of St.Peter, since recent excavations have discovered glass slag, glass works were now established by James Hartley and others, and by the middle of the 19th.century were making 7,000 tons of window glass and 23 million glass bottles. Sunderland became world famous for glass when James Hartley patented his process for making plate glass. This process completely revolutionised the industry and resulted in great glass buildings such as the Crystal Palace of 1851. (4) The industry declined on the Wear later in the century, due to foreign competition, but today one of Sunderland's most important industries is the manufacture of heat-resistant Pyrex glass by Messrs.James A. Jobling & Co.Ltd. This Company now has most of the British market for heat resistant domestic glassware as well as laboratory glassware, and it exports to a very large range of countries.

Potteries were also introduced and flourished from the middle of the 18th. century when the old Garrison or Sunderland Pottery was founded. By 1818, some 292,000 pieces were exported so considering the domestic market, this implies a large industry at its peak employing between 2,000 and 3,000 men. Beginning with the potteries and boatbuilding

yards at North and South Hylton, industrialisation was intensified downstream from Southwick and Pallion. Shipyards, glass works, lime kilns, salt pans, roperies and copper works lined the river banks and the growing employment in these industries, the iron works at Bishopwearmouth and the coal trade was responsible for a rapid extension of the urban area inland, chiefly on the south side of the river. About two thirds of the 25,000 inhabitants of the Wearmouth cluster lived on the south bank but the construction of a bridge in 1796 served to connect the settlements.

This first bridge to span the Wear was promoted by Rowland Burdon M.P.. It had a span of 236 feet and was, at the time, the longest single span, cast iron bridge in the world. It was re-modelled and widened in 1859, then replaced in 1929 by the present bridge, which was built alongside and above its predecessor without holding up traffic. In 1879 a railway bridge was built connecting the north side of the town with the south.

Thus, the 19th. century saw a rapid growth in industry and commerce, which was accompanied by a corresponding increase in population. Between 1811 and 1891, the number of inhabitants rose from 25,000 to 131,000. This vast expansion necessitated far reaching improvements in communications, docks, river and harbour facilities. The estuary of the River Wear, known

to the Saxons as Wiri and to the Romans as Vedra, has provided a harbour for ships from the earliest times. The town's first charter, in 1183, indicates that Sunderland then was a place of maritime importance, whilst as long ago as 1669, the King granted Letters Patent to one Edward Andrew to build piers, a lighthouse and other ancilliary works.(5) As previously indicated, the real importance of the port dates from the opening of the Durham Coal Fields and the development of the coal trade with London and the south. In 1717, Commissioners of the River Wear were appointed by an Act of Parliament to manage the Port. There are 37 Commissioners representing the Minister of Transport, the Sunderland Corporation, the National Coal Board, Shipowners, Shipbuilders, Engine-Builders, Importers and Exporters and the Bondholders; their jurisdiction extends from the harbour entrance to Biddick Ford, about nine miles up-river. They set to work to improve the port by dredging and building first a pier on the south side; completed in 1726, subsequently followed by a second pier on the north side. The river being improved, there was now a demand for docks on both sides of the river. Owing to there being so many factions who favoured particular plans, the dock scheme was deferred again and again. This impasse was broken chiefly through the influence of George Hudson, called 'The Railway King', whose meteoric career is

one of the romances of Sunderland. (The Annexe used by the Education Department of Sunderland College of Education, formerly Hudson Road School is still called the Hudson Annexe). The North Dock was opened in 1837 and the South Docks in 1850. In 1885, the Foundation block was laid for the first of the two outer piers which now protect the harbour entrance. In subsequent years, improvement has continued to keep pace with the growing needs of industry, shipping and trade and today the port can accommodate large modern vessels and handle all kinds of cargo. On the banks of the river, for a distance of over three miles upstream there are shipbuilding and ship repairing yards, marine engineering works and coal shipping staithes. The South Docks system is comprised of the Hudson - and Hendon Docks which have a total water area of 55acres and are designed to handle coal and general cargoes. The North Dock, which is tidal, has a ship repairing berth 840 feet long and can accommodate vessels of 65,000 tons. (6)

The trade off the port reflects the industries of the town as can be seen from the appendixes. The chief export is naturally coal destined for the power industries of the South East. The largest import is petroleum, which is distributed by road and rail throughout the North East. Other imports include sisal from East Africa for local ropeworks; woodpulp from Scandinavia and esparto pulp from North Africa

for paper making; and silver sand and borax from Holland for the Pyrex glass factories. The development of the Port over the years has exercised a significant influence upon the growth of town and since the prosperity of the Port and Town are closely linked they are of vital importance to this survey.

Prior to 1919, Sunderland had been a town dependent chiefly on coal, shipbuilding and engineering, a slump in any of these causing high unemployment. This is what happened in Britain during the early 1920's when shipbuilding almost ceased. As a result of this, and the Joiners' strike many yards,e.g. John Blumer and Co. and John Priestman and Co. had to close down. By the autumn of 1923, 14,000 shipyard workers were unemployed, increasing to 19,000 by the end of 1925. To end this dependence on shipbuilding and allied industries, a joint meeting of the Town Council, the Trade and Commerce Committee, the River Wear Commissioners and the Chamber of Commerce was called. All that resulted were ideas on attracting more of the timber trade from Hull. The decade between 1920 and 1930 was indeed a grim one for Sunderlamd. In 1921, Messrs. Craven and Speedings' rope works closed down and because the coal trade declined, railways and mines were affected. The strike of 1921 caused much misery and when the Unemployment Benefit or 'dole' went down from £1 to 15s.0d. there was

a demonstration in the town. Labour unrest finally culminated in the National Strike of 1926. This unhappy state of affairs continued in the 30's when unemployment in Sunderland was still very high. Relief schemes were organised such as road improvements, levelling ground to create playing fields and men were encouraged to supplement their diet by growing vegetables in allotments of which Sunderland had over 5,000 in 1931. One method of fighting the depression was an attempt to improve the status of Sunderland as a port. In April,1931 plans were made for a new £400,000 deep water quay, a £100,000 coal staith for the South Docks was completed and land in the Hendon area was reclaimed to provide industrial sites. The new deep water quay was completed in May 1934, though the first regular service did not begin until November 1936, when the Swedish Lloyd Line of Gothenburg began a fortnightly service from Gothenburg to Sunderland. In January 1935, plans were put forward to a Parliamentary Committee for a fish quay and market for the town costing £100,000. Unfortunately the plans were rejected and Sunderland's hopes of emulating the rise of Hull as a fishing port were disappointed. Many efforts were made to 'sell' Sunderland to industrialists and hence the importance of possessing a Technical College became more evident. The greatest hope for the town seemed to be a

Government Commission for the Distressed or Special areas of England and Wales. In May 1934, when a Government Commissioner visited the town, plans were laid before him by the Industrial Development Board, whereby the shipbuilding, engineering and coal trade could revive the town's economic life. It was suggested that Sunderland could become the centre of a new industry extracting oil from coal and the Admiralty could place orders with Wearside shipyards. Eventually the Commissioner for the delegated Special Areas of England and Wales recommended a new trading estate for the North East. In December 1935, Sunderland prepared plans for such an estate at Fulwell and submitted them to the North East Development Board. Again the town was disappointed and in August 1936, it was announced that Team Valley had been chosen for the estate, although the plans for Fulwell had come a close second. But the idea of a trading estate in Sunderland remained and the unemployed 18,000 men made it very necessary. A small 18 acre site at Pallion was allocated (a site which could be extended to 40 acres) and in 1938 Sir George M.Gillett, Commissioner for the Special Areas of England and Wales opened the Pallion Trading Estate. Even after one year of war, 1939, the unemployment position in Sunderland was unendurable especially when considered against the needs of the nation. The Government

anxious about the training of more skilled workers, had appealed to employers to press forward with the training of men and women of varying degrees of skill. Disappointed with the results of this appeal, the Ministry of Labour threatened to use compulsion to obtain the progress he wanted. He had already ordered compulsory registration of skilled men in a number of occupations, mainly engineering, and this industrial registration was the first step to the total mobilisation of the industrial resources for the war effort. This was irritating to Sunderland, because early in the War the educationalists and industrialists had submitted a scheme to the Government stating, " Sunderland is a town with thousands of unemployed, many of whom would make suitable trainees, with available engineering works and plant employed far below its capacity, with a Technical College of considerable resources and with industrialists prepared and eager to co-operate in the training scheme." In spite of repeated efforts by the Local Authority and others nothing was done. This remarkable state of affairs continued because Sunderland was considered a vulnerable area and that its engineering establishments had enough work on hand. From this period, onward, the Education resources of the town were now considered to be one of its assets. Truly the pioneering of Councillor Roche, Dr Gordon Bell etc. was reaping its rewards.

In October,Mr.Ronald Cross, the Minister of Shipping, visited Wearside and was greatly impressed saying " The capacity of the ports and docks to deal with a suddenly increased flow of traffic is very satisfactory. I have found extremely few matters about which it was felt that there were still some difficulties to be overcome...". The Mayor would not have agreed with him because he compiled details of idle plant and machinery on Wearside which could be employed in turning out munitions. It is reported in the Echo on April.8th. 1941, that the Mayor felt that the only thing left for him to do in regard to Wearside's grievances about the failure to use industrial capacity to the utmost was to see the Prime Minister ...." in spite of all appeals, made by the Government for increased effort and increased output, we have had factories and workshops standing idle, others only partially at work, and thousands of unemployed." As the War progressed, the shipyards and engineering capacity were fully used and the town became a hive of activity.

If the period between the Wars was one of depression and stagnation, since 1945 Sunderland has made great strides in all fields, especially that of Education and house building. When the War ended, Sunderland needed 13,000 new houses to make up the leeway of the War and to hasten the demolition of blighted areas.To coincide with this were plans for new schools

extensions to all forms of Higher and Further Education together with the construction of a new Town Hall, railway station and bus station. This post war development programme also included a big extension of the Borough boundaries to include the new housing estates that were being planned with their shopping centres, new schools, playing areas and open spaces. This extension trebled the area and increased the population to well above 200,000.

Industrially, Sunderland had relied heavily on shipbuilding which had, during the war, produced a quarter of the country's merchant shipping tonnage. After the War, the policy was to encourage a greater diversity of industry by developing Trading Estates and the importance of the Technical College can be seen by the following; "New industries coming to the town are increasing the range of skills available and by working closely with the Technical College are providing facilities for the acquisition of new techniques in practically every field of industry." Of the Borough's 13,391 acres,1,080 acres are allocated for industrial use, 850 acres are occupied by industry, 75 acres are held by firms for expansion leaving 75 acres available. (7) The Pallion estate was enlarged from 17 to 40 acres and new estates constructed in the areas of North Hylton, Hendon, Camden Street Pennywell and Ryhope Colliery. So at present, shipbuilding and marine engineering

employ about one tenth of Sunderland's total labour force and one fifth of the workers engaged in industry. The other (industrial) four fifths are employed in the manufacture of aircraft engine components, beer, clothing, engineering and electrical goods, ferrous and non-ferrous castings and forgings, furniture, gears, glass, metal goods, mobile cranes, paint, paper, piston rings, pumps, radio and television tubes and valves, telephone apparatus, transistors and travel goods. This diversification of industry has been of great help in ending the town's total dependence on heavy industry and since the town is offering factories and labour, the quality of labour is of vital importance. Industrialists drawn to the South East must have some added inducements to expand in the North East. Government development grants are important but so is the promise of an adequate well-trained labour force. Hence the value to the town being able to say:

"The staff of the Technical College are encouraged to undertake consultative work for industry in the region; which provides manufacturers in the region with a first class consultant service on their doorstep, seldom obtainable elsewhere in the United Kingdom, and many industries have taken advantage of this facility with highly beneficial results to themselves. Co-operation between the College and industry extends, when appropriate, to the successful

interchanges, for short periods, of staff. Industry is making extensive use of the Elliott 803 Computer which has been installed. Demands for the use of the computer by industry, for the training of computer personnel, for teaching and research, have now reached the point where the Governors of the College are exploring the possibilities of installing a new computer with a wider range of facilities while still retaining the present installation."

" The College can offer courses for graduate qualifications, post graduate courses, has the largest School of Pharmacy in the British Isles and can offer courses in Mining, nautical studies, town-planning, hydrology and all aspects of Management. The West Park College of Further Education provides for less advanced courses, copes with the Ordinary National Certificate courses and trade courses in the fields of electrical engineering, mechanical engineering and naval architecture. More important however, are the facilities that West Park and Monkwearmouth College of Further Education can offer for apprentice training and the re-training of adult workers ". (8)

Thus the end of 1968 still saw continued high unemployment, and so long as the national economy requires restraint in spending, the demand for the products of much of Sunderland's industries will remain limited and plans for

expansion deferred. The 'squeeze' introduced in July, 1966 and reinforced by subsequent Government measures to reduce home demand, has raised the level of unemployment throughout the country and the effects are most felt in areas where there is already under-employment, especially in areas where heavy industry predominates. Moreover, as the present trend is to replace more and more men by machines, it is the unskilled labourer who loses his job and finds it more difficult to obtain new employment. Therefore, as the modern age demands more skilled technicians, so it is vital for the community to be able to give a good general education to its children followed by facilities for higher education and the acquisition of technical skills. The unskilled labourer must be re-trained, the new army of technocrats and technicians not only trained but kept up to date.

Thus, the art and technical institutions, the college of education and colleges of further education which have grown up in response to local needs, then increasingly to regional needs are now vital to the economic welfare of the nation.

Chapter 2

The History of Shipbuilding in Sunderland.

The first evidence of shipbuilding in the locality was the discovery of a primitive boat lying in the river bed at Hylton. It was estimated to be about 4,000 years old and had been hewn out of an oak tree. The first known record is from " Vide Exeplum,19 Ed. Three Regis 1346." and reads:- " Thomas Menvill occupaint quand 'locum ibidem vocat' Hindon per aedificando naves, et solvit prande ~~Lipsic~~ Episc.' annual redditum 2s." , the translation of this being " Thomas Menvill occupied a certain place called Hendon, for the building of ships, for which he paid to the Bishop an annual rent of 2s." Nothing is known of the Menvill ships, their type or the purpose to which they were put. But one thing is known and that is thatMMenvill was very successful, as the record of 1358 verifies:- 'Thomas Menvill held the Borough with the Free Rents + worth 32 shillings and eight pence - the fishing in the Wear, the Borough Court, the tolls and stallage with eight years belonging to the Bishop.', and only twelve years after his yard was opened, Menvill was one of the leading

citizens of Sunderland.

Shipbuilding cannot have been of great importance during the next two hundred years since there are no records. This is revealed by an Elizabethan Commission sent in 1588/ 1589 to account for the lack of custom dues. They reported that the town was in great decay and carried on a little fishing, shallow coal workings and had some salt pans.

Things had changed by the middle of the 17th. century because local records mention in 1648 shipwrights named John Forster and Crosyer and in 1667 the Goodchilds and Adam Nichōlson. Indeed, these family names are mentioned in connection with shipbuilding over a period of about 150 years.

In the late 18th. century, the Wear experienced a minor 'boom' as many yards were established in this period. Hutchinson's History reveals 190 ships belonging to the port of Sunderland; twenty-four years later, this number had increased to 850. Whilst this proves nothing in connection with shipbuilding locally, it is likely that many of these vessels would be Wear built. One of the earliest reports on the state of the industry is contained in a House of Commons report dated 1806 which gives the output figures as follows:-

	Total	Av.Tonnage	Largest Tonnage
1790	19	144	312
1791	6	202	356
1804	51	163	349
1805	36	163	337

The early years of the 19th. century were noteworthy because of the number of new yards established (9 in 1801 alone) under names still well-known today. Shipbuilding was also carried out at odd times and in strange places - even back yards. One ship of 63 tons was built, in 1799, on Bishopwearmouth Green by a shipwright, in his leisure hours - and in 1817, a 15 ton ship was built in Nile Street. The North Sands were thronged with small yards for during the years of the war with France the demand for ships was great,and when ships were needed to carry coal Sunderland became reknowned for its shipbuilding. Many firms such as Austins, Bartram's, Pickersgill's, Laing's and Crown's still in existence today began during this period of prosperity, surviving the national depression of the 1840's when so many shipbuilders went out of business.

The end of the depression saw the advent of iron in the construction and steam for propulsion of ships though the old methods of wood and sail continued for a number of years,

the last wooden ship being built in1890 and the last sailing ship in 1893.. 1845 saw the launching of The Experiment, Sunderland's first steam ship, built by Thomas Rountree. It was regarded as an afterthought, for the ship was originally to have been just another little wooden sailing ship, but became the first screw collier in the London coal trade. Sunderland's first iron ship, the 'Loftus',launched in 1852, and weighing only 77 tons, was built by George Clark, marine engine builder, in conjunction with Barkus, a shipbuilder. James Laing's 'Amity', the second iron ship, was launched on September 20th. 1853, with a tonnage of 479 and the'Great Northern' of 577 tons followed in June, 1854. During 1853 four steamers were built; the Indsmitalde - 911 tons - by Thomas Henderson; the Lowestoft - 345 tons - by Laing; the Wearmouth - 594 tons- by Laing; and the Reme- 322 tons - by William Pile. From then on, iron steamers were built in increasing numbers for during the 1850's there were 75 shipbuilders on the Wear. Steel was introduced in the 1880's and when the 20th. century began shipbuilding was flourishing on the Wear. The size of cargo ships was growing steadily, the return of 70 vessels of 267,034 tons in 1900 the Wear's highest on record, and the prospect was good, with work in hand for several months.

By 1909, the industry began to emerge from the

depression and there was another boom which carried on into the war years. In 1912, Swan Hunters prepared to open their Wearside yard at Southwick. Of the 1914 total of 74 ships and 319,225 gross tons, 28 ships,(122,690 tons) were built for foreign powers.

When the war broke out, orders poured in and many yards were required to devote themselves exclusively to Admiralty vessels of various kinds. Other yards divided their efforts between cargo vessels and naval work. There was no strict control over the allocation of man power such as was exercised between 1939 and 1945, and many of the best and most skilled men joined up. This shortage of labour, plus scarcity of materials, was reflected in the output figures for the war years of merchant tonnage.

Wearside Merchant Shipping Output 1915-18

1915	-	31 vessels	-	111,329 gross tons.
1916	-	39 vessels	-	159,560 gross tons.
1917	-	51 vessels	-	209,809 gross tons.
1918	-	60 vessels	-	267,759 gross tons.

These figures show evidence of the increased activity in the Wearside yards as the 'U' Boats took their toll.

Merchant Vessels built by Various Firms 1915-18

Firm	No.of Ships	Gross Toms
Laings	18	109,924
Doxfords	16	94,298
J. Thompsons	17	91,486
Shorts	17	86,391
Priestmans	15	63,627
Pickersgills	12	54,715
Blumers	14	48,456
Sunderland Shipping	11	42,979
Bartrams	12	41,658
R. Thompsons	10	31,702
Austins	13	28,979
Osbourne, Grahams	12	26,442
Crowns	8	14,591
Swan, Hunters	No record.	

Naval Craft 1914-18 (includes torpedo boats, sloops, destroyers, lighters, barges, patrol vessels, troopship, etc.

Doxfords	21	Osbourne, Graham & Co.	37
Shorts	14	S. Shipbuilding Co.	19
Laings	6	R. Thompsons	11
J.L.Thompsons	6	Austins	5
Bartrams	2	Blumers	5

In the early months of 1918, work was begun on two new shipyards on the river - the Egis Shipyard at Pallion, and the Wear Concrete Building Company. The first launches from these yards did not take place until June 1919, more than six months after the war had ended. As soon as the war was over, in 1918, restrictions were removed and there was a rapid return to normal private contracting. The first post-war year was highly prosperous, 63 ships were built of 288,662 gross tons and launched in 1919. 1920 was an even better year for launches - 67 ships were built of 333,335 gross tons, the fourth highest on record. 40 of the 67 ships were for foreign owners, showing how dependent the industry was on orders from abroad, but before 1920 was half-way through there were signs that a depression was approaching due to conditions only too familiar today. Steel rose to £24 a ton and with rising wages two ships on the stocks increased by 50% in price.

The slump increased in 1921 with more cancelled and suspended orders, whilst the Government sold ex-enemy ships at less than half the cost of building them. A period of depression had definitely set in and output in 1921 fell to less than half the figure for 1920. The position worsened in 1922 and in 1923 the figures dropped to 17 ships

and 56,522 gross tons. By July, 14,000 men were out of work. In June 1922, only 28% of the 52 building berths on the river were occupied by ships on which work was proceeding, 16% had vessels on which work had either been suspended or cancelled, and in 1923 five yards had no launches at all whilst another five had only one launch each.

1924 saw a slight revival - 56 ships of 207,796 tons - due mainly to the work left unfinished by the boiler-makers strike of 1923, but by the mid-year, fewer than half the berths were occupied and at the end of the year only 18 ships were being built and only two more orders were in hand. The depression deepened in 1925 and 1926. The firms of Blumer and the Sunderland Shipbuilding Co. passed quietly out of existence and the number of building berths was reduced to 46. The output for 1925 was a modest 23 ships of 103,247 tons and the position worsened in 1926 when only 8 ships were launched with a total tonnage of 36,979 tons. However, the picture brightened towards the end of 1926; Swan, Hunters re-opened their yard at Southwick to build 3 Canadian Lake Steamers, other firms placed orders, output rose in 1927, 1928 and 1929 and unemployment declined. Acute depression again set in during 1930 and launchings dropped:-

1929 - 58 ships- 243,924 tons.

1930 - 42 ships - 175,507 tons.

and Wm. Gray & Co. decided to close their Wear shipyard. By the end of 1930 the slump had returned in a much more severe-form than the early and mid-twenties. Sunderland was facing by far the blackest period in the history of its shipbuilding industry. There were only three ships under construction when 1931 dawned, output for the next few years was very low and this depression made the slump of the twenties comparitvely mild.

Output Returns : 1931 - 1935.

Year	Ships	Gross Tonnage
1931	7	8,814
1932	2 (colliers)	2,628
1933	5	11,598
1934	8	19,210
1935	8	31,396

Unemployment figures rose to about 30,000. Many skilled men left the area and very few boys were apprenticed to the shipyard and engineering trades in these worst years of depression, proving to be a serious handicap when war broke out in 1939. Since many shipyards were being permanently closed and dismantled , in February, 1930 the National Shipbuilders Security Ltd. was formed, which aimed at buying up shipyards which were considered to be redundant. After the

First World War the number of berths had been far in excess of the demand for new ships and to eliminate redundant yards and concentrate production in the hands of the most efficient and progressive firms was the only way to save the whole industry from collapse and disaster. Under this scheme, Sunderland lost four shipyards; July 1931 - Osbourne, Grahams; April 1932 - Robert Thompson; May 1933 - Swan, Hunters; and November 1936 - Grays yard, making a total of seven since the war and in addition, Priestman's did not re-open until half way through World War 2. This was a severe blow to the town and its major industry. Throughout the depression, though most yards did not build a ship for four to five years, the firms were not idle.

Several took up shipbreaking as a means of finding work for some of their men e.g.Bartrams, who also built caravans whilst others went in for furniture making e.g. Pickersgills. Of more importamce however, were the preparations that firms made, ready for the trade revival they were sure would come. They re-modelled their yards, re-organized their methods of working, installed new machinery and conducted experiments and research which later enabled them to produce better, faster and more economical merchant ships.

In 1935, the Government introduced its Scrap and

Build Scheme with the object of assisting both shipping and shipbuilding to regain some of their former prosperity. Under the British Shipping (Assistance) Act, of 1935, the Board of Trade was empowered to lend money, at no more than 3% interest, to promote the rebuilding and modernizing of British ships. Loans were conditional upon the scrapping of two tons of shipping for every ton built under the Act. Almost at once improvement set in. Sunderland benefitted more than any other shipbuilding centre from the scheme because, of the 50 vessels built in the two years after the Act, 24 were constructed in Wear yards. This scheme ended the worst period of the long depression. From 8 ships (31,396 tons) in 1935, the total increased to 35 ships (138,791 tons) in 1936 and there was a steady improvement in the following years until everything was speeded up by the outbreak of war again in September 1939.

In 1938, 35 ships (169,898 tons) were launched, the highest since 1930 but during the year only seven orders for new ships had been placed on the river and at the beginning of 1939 there were only nine contracts in hand and only four yards in use:- Doxfords, Laings, Thompsons and Crowns. The position was again looking desperate until the Government made available £2,750,000 a year for five years to subsidise

tramp shipping and cargo liners, and £10,000,000 for loans to shipowners to encourage them to build ships in British yards. The response was immediate. Six orders were placed in the first week, 28 in a fortnight and 40 in less than three weeks.The orders continued to come in and the ship-building industry was in full swing when war was declared in September 1939.

The war and its aftermath created an enormous demand for all types of shipping. The Sunderland yards played an important role during this period, producing merchant craft to replace those lost at sea. At the outbreak of war, there were only 8 yards on the Wear compared with 16 in the period 1914 - 1918 but a new yard was opened in 1943 and together the 9 yards produced 245 ships totalling 1,502,239 gross tons between 1939 and 1945. These figures represent something like 27% of the total output of merchant shipping in the U.K. for that period and this achievement is even more remarkable when it is considered that the Wear yards , and indeed all British yards, had to contend with the expedients of war time- air raids, blackouts, shortages of labour and materials. This shortage of labour prevented the opening of new shipyards or the re-opening of those which had been closed. Instead, production was concentrated in existing yards and in three of

these Bartrams, Laings and Crowns new berths were constructed. Not until late 1942 did J.L.Thompson begin a new shipyard for the National Ship Building Corporation on a site formerly occupied by Swan, Hunters. Also, during this period Pickersgills took over the yard of Sir John Priestman & Co. and after re-development concentrated on small craft.

During the war years, all records were broken, both of individual yards and total output of the river. Doxfords headed the list with a total of 75 merchant ships of more than half a million tons. Joseph L.Thompson had the second highest output of 43 ships totalling 300,000 gross tons (this figure would have been greater but for the bomb damage suffered in early 1943). In July 1942, after 13 months of re-building the 'Corporation' yards saw its first launching and before the end of the war a further five, making a total of 42,500 gross tons, were built. Sir James Laing and Co. concentrated mainly on tankers. The yard record of launchings,- 7 in 1914 - was beaten in 1942 with 8 ships of 65,570 tons, (7 tankers) and their total output was 31½ ships for the war, the ½ being the fore end of a tanker constructed to join up with the aft end of a Norwegian vessel which had broken in two in the Atlantic, and had been towed into the Tyne. Short Brothers, though never at any time during the war did they employ more than 1,000 men

turned out 27 merchant ships and still found time to build a tank landing craft. Bartram and Sons broke their previous records by launching 5 ships in 1943 and during the total war period 21 vessels were built, conversion work was carried out on 4 others and extensions to the yard were made. Wm. Pickersgill and Sons produced 116,814 tons of merchant shipping and in 1943, on request by the Admiralty, switched to naval work. They built 3 corvettes, 5 frigates, 6 tank landing craft, 2 large transport ferries and more than a score of T1 class tugs. S.P.Austin and Son built 30 vessels between September 1939 and May 1945 totalling 65,000 tons, all but a corvette and a tank landing craft being colliers of three standard designs. John Crown and Sons, the smallest yard on the river, also broke records, producing over the period, a collier, 7 tugs, and for the Admiralty, 10 corvettes, a frigate and 2 trawlers.

After the temporary increased output of war time it was thought by many that shipbuilding in Britain as a whole, would revert back to its pre-war level and even descend to the depths of the early thirties.However, with the end of the war, and with the military defeat of Britain's two main shipbuilding rivals, Germany and Japan, the country was still in a dominant position. Just when orders were beginning to

ease, the Korean War began and five years later the Suez crisis increased the impetus of the industry. For the 15 years following the end of World War 2, the North East produced well over half a million tons of merchant shipping annually, representing about 40% of British output. Yet there was no sign of growth and percentage of world output fell. The reasons for this were two fold. First, there was a shortage of men and materials, steel in particular being in short supply. Secondly, the over capacity of the thirties was well remembered and companies were reluctant to extend beyond a certain limit.

The problems were felt in Sunderland as in any other shipbuilding region, if not more so. While the post war boom continued, there was some anxiety as to the middle and long term future of the industry. The North East Development Association forecast that although yards were likely to be busy for three years, a decline could then set in and it seemed probable that the industry would be faced with a marked contraction within a few years. Both Sunderland and the Hartlepools were especially picked out by the survey as likely to suffer again from high unemployment.

The harsh winter of 1947 aggravated the problem of supplies. Mr.R.Cyril Thompson, of J.J.Thompsons and Co., was

moved to warn that "The situation will inevitably lead to wholesale unemployment unless it is quickly remedied." The Thompson programme had been badly retarded when steel supplies were limited to 60% of requirements. Doxfords had only five ships completed that year instead of the usual average of ten; while at nearby Bartrams the completion of a 9,000 tons passenger ship was held up because of a shortage of door knobs.

In the following years, despite furhter limitations made on the industry (in 1948 Stafford Cripps announced that steel supplies to the industry were to be cut by 20% of the 1947 figure) the demand for oil tankers remained high and orders for the N.E. were quite numerous. Even John Crown & Son Ltd. , a subsidary of J.L.Thompson, had an order for a 23,000 d.w. tons tanker, although they had never previously built anything larger than 4,000 tons. By the end of 1949, steel deliveries began to meet requirements but this was due only to lessening demand. Within a few months the position was as bad as ever when the Korean War started a new boom.

By the month of March 1951 all firms in the area had full order books, and in the following month Thompsons landed part of the £45 million order by the Dutch Royal Shell Group. The picture was not so rosy, however, for the

Chancellor, in that year's Budget, withdrew the 40% tax allowance on the cost of new plant and this at a time when Doxfords were increasing their marine engine and shipbuilding output by 50% and J.L.Thompson's were enlarging their berth capacity to handle fewer but bigger ships.

By 1953, the spate of new orders had subsided and the whole of British shipping industries were beginning to feel the threat of Japan and Germany. Then came the Suez crisis in 1956 and revived the freight market and the orders for shipping. In the first half of that year the Wear booked 19 new orders and by the end of the year there were 140 ships on order or under construction, worth about £120 millions and guaranteeing work for four or five years ahead. Unfortunately, orders did not continue at this rate and many were cancelled. Dr. Ramsay Gebbie, chairman of Doxfords, said that half a dozen contracts with his firm had been cancelled by October, 1958 and others had been deferred. By the end of the decade, shadows of the thirties were returning again. In the five years from 1961 to 1965 inclusive, North East output averaged less than 500,000 tons and its share in world launchings fell to 5%.

Yet despite the discouragements, there were many signs of health. J.L.Thompson & Co. had just spent millions

of pounds, reorganising facilities to allow the construction of much bigger ships. With a few additional alterations they would be able to construct vessels of up to 100,000 tons. Thompsons at this time had received an order for an 80,000 ton tanker worth £4 million. Still the overall picture was gloomy. The industry's order books held just sufficient work for two years. Mr. Allan Marr, the Managing Director of Sir James Laing & Co.Ltd., said that in 1961, his firm had received a lot of enquiries but no orders. Only a fifth of the enquiries had come from British owners whereas, at one time, four fifths of the firm's orders had come from the home market. For the smaller firms, this was a period of do-or-die and in 1964 Short Brothers were forced to close after being in business since 1849.

As the crisis spread, the Government at last agreed to subsidise in order to encourage the home market, and to counteract difficulties all aspects of the market were probed as well as outlets into 'landed' interests were made. Austin & Pickersgill latched on to the need for the tramp cargo vessels, the 'Liberty' ships, and designed a standard 14,000 ton shelter deck vessel as a replacement for those which had been built during the war. Within a few months of announcing this design, four orders were placed, with the

prospect of more to come.

Despite these recuperations, British Shipbuilding was still losing ground and after the Geddes Report, there was much talk of reorganisation of the industry in the North East and the merging of interests. After considering the possibility of establishing one integrated building unit on the river, the decision was taken against this step. Two groups for building ships on the Wear were formed in the place of several independent operators. Austin and Pickersgill Ltd. took over Bartrams and Sons, enabling material economies to be effected. The Doxford and Sunderland Shipbuilding and Engineering Co.Ltd.was itself a grouping of three separate yards, and for part of their further modernization schemes, extended the large berth at North Sands, to enable ships of 150,000 tons deadweight to be built.

As a result of the Shipbuilding Industry Act, with the introduction of credit facilities for the British shipowners, the industry is remaining comparatively buoyant, having sufficient orders to secure the prosperity of the 6,000 men employed in the yards for the next one and a half years. This in turn will help to keep up the volume of work in the ancillary industries in the town, which look to shipbuilding for much of their livelihood. However , long

experience has shown both in this country and in other shipbuilding nations, that a shipbuilding order boom offers no certain continuous prosperity. Competition is so fierce that economic survival depends upon making the best use of all facilities, especially of the skilled labour force and hence the vital necessity of ample training by means of further education for all levels of work.

Chapter 3.

Further Education in Sunderland

Before 1908

There was little or no provision for Higher & Further Education such as we know it today, in the early part of the 19th. century, indeed almost throughout the whole of the 19th. century. But it was during this period that education had its beginnings, even if most of this was of an elementary nature.

The museum has records of early Evening Classes, such as that in 1788, when Mr.Rowland Weatheral advertised a Night School at his home in Captain Hopper's Buildings. He taught:- 'Writing, and all branches of the Mathematics, including Common Accounts, Algebra, Geometry, Navigation, Astronomy and Fluxions' His handbill also offers instruction in 'Drawing in Architecture and the Perspective, the use of Globes and Geography'. It also states:- 'Ladies and Gentlemen who desire to be privately instructed may be waited on at their own homes at convenient hours.' (1) Thus the middle-class citizens of Sunderland and the higher echelons of the sea-faring community would be catered for by private academies and organisations such as the

Sunderland Polytechnic Society, which had its first exhibition on Sept.4.1838, (2) consisting of paintings, drawings, statuary and mechanical inventions. As elsewhere, the provision of any higher or indeed vocational instruction for the working class was non-existent.

The Sunderland Mechanics' Institute began in 1825, in a house in Sunderland Street (3) and had for its aims 'to educate the illiterate, to direct the studious, to afford every necessary aid to the intelligent and ingenious, and to assist every mind aspiring to knowledge.' (4) This differs somewhat from the modern prospectus issued by the various departments providing Higher Education today although its ideals should be appropriate.

At first it flourished, having over 250 members by 1827, paying an annual subscription of 12/-, a library of over 400 books and science apparatus for the monthly lectures on Chemistry, Mathematics and Mechanics. The lecturers who gave their services free, 'endeavoured on all occasions to illustrate the principles of the different arts and sciences, so as to elucidate completely the subject on which they respectively discourse or lecture to the humblest capacity.' (5) By 1831, the Institute had moved to Sans Street, the membership of over 300 now paying an annual fee of 8/-, apprentices 6/-. (6)

After 1834, there is no mention of the fortunes of this Institute, which must have declined, because in 1844, Vint & Carr's Directory only tells of an Institute of Mechanics, situated at 9, Bridge Street and founded in 1837 by the Earl of Durham. No reference to this Institute can be found after 1856 so it may be assumed to have suffered the fate of the other Institutes in the area and country. These are listed in J.Sykes' "Local Records", vol.3, 1833 , who was much concerned in 1846 about the decline of the Newcastle Institute. Although these may be considered as failures, when one considers the number of men attending evening classes later in this chapter, it does justify the argument put forward by Thomas Kelly in ' A History of Adult Eduaction ' partly repudiating the widely held view that the Mechanics' Institutes were a failure. Critics say that they failed to attract the working people, that they failed to accomplish any serious educational work and that in any case they were dead by the nineteenth century. Even if the Institutes failed to capture and hold the interest of the masses of the working people i.e. the unskilled workers, in the North of England and in Scotland, lists of members' occupations indicate that they did attract the skilled manual worker, some shopkeepers, business and professional people. Whilst in the majority of Institutes, serious systematic

lecture courses in Science were replaced by miscellaneous programmes of single lectures and short courses on a variety of topics such as science, history, literature and musical evenings; in the north of England and especially in Scotland the genuime educational work of the Institutes had now been transferred from the lecture room to the classroom where instruction could be given in small groups. For example, in Manchester, 1015 pupils were taught in classes 635 were learning writing, grammar or arithmetic and the remainder mathematics, drawing, music and French. In 1851, Huddersfield, a really working class Institute, had 600 members in regular attendance at classes in reading, writing arithmetic, music, elecution, composition,shorthand, geography, history, drawing, French, grammar, geometry, book-keeping, literature, chemistry and natural philosophy. (7) Perhaps the Sunderland Institutes may have done work of this nature, which laid the foundations for the attendance at the night classes established later in the period.

Until the middle of the 19th. century, all provision of any form of education had been of a private nature, but after 1853, the influence of the State intervention, however meagre, can be detected. This took the form of payment by results, by the Science and Art Department of the Board of

Trade, established in 1853, to a School of Navigation, in Lodge Terrace, founded in 1855, by Mr.J.J.Styles. This school, with a staff of four, offered courses suitable for boys and men wishing to go to sea, in Navigation, Arithmetic, Astronomy, Trigonometry, Geography, Algebra and Steam engines. (8) Records of grants from South Kensington cease after 1863.These records also list a School of Art and Science in Bridge Street established in 1861, but closed after a special examination, in 1863.(9) This school seemed to do more Art than Science and grants received were small indicating that few pupils were sitting the South Kensington examinations.

In 1869, a School of Art was opened at 21,Norfolk St, Headmaster Mr.Stephen Thomas (10) and a Science class established (11) at Monkwearmouth Colliery School. By 1872 these were amalgamated at 21, Fawcett St.,Headmaster, Mr. William Cosensway, and are referred to in the South Kensington Reports as the Government School of Science and Art, No.1141 (Sunderland). This school can be regarded as the forebear of the Technical and Art Colleges and was the first institution providing any education of a Technical nature for a continuous period. At this time, the school, which had 51 day students, 89 evening students and a part-time staff of 6, offered Art

classes (painting and drawing) by day and Science classes (Machine construction, Building construction and occasionly Mathematics and Mechanics) in the evening. In 1872 it received £138. 17s. 11d. from the Dept. of Science and Art. (12) In 1880 the school moved to Toward Road (13) and then back to 27 Fawcett St. in 1883. (14)

The growing interest in education, aided by the 1870 Act and the South Kensington grants, is indicated in the Reports of the Dept, of Science and Art which after 1872 list 22 Science and Art evening classes in the town. Of these only School 1141, known as the Central School in the Minutes of the Management Committee of the Government School of Science and Art 1141, offered both day and evening classes. In 1872, the Bishopwearmouth National School, Rectory Park (1136) had 69 students taking Practical Plane and Solid Geometry, Machine Construction, Building Construction, Pure Maths, Theoretical Mechanics, Applied Mechanics and Steam Engines, whilst the Central School had 6 science students taking Machine Construction and 4 taking Building Construction. By 1877, there were 168 Science and 121 Art students at 5 other evening class centres - Monkwearmouth Workmen's Hall, 1139; - Milton Hall Academy, Vine Place, 1140; - The Y.M.C.A. 1143; and Hendon Church Institute, 1144.

The bias towards Art by the Central School was well illustrated in 1881 when it had 12 Science students and 120 Art students, whereas the other ten evening class centres had 327 Science students and 180 Art students. The Science subjects offered by the Central School were Practical Geometry, Machine Construction and Building Construction, whereas the other classes offered Practical Plane and Solid Geometry, Machine Construction, Building Construction, Pure Maths, Accoustics, Light and Heat, the Theory of the Steam Engine, Magnetism, Electricity, Chemistry and Physical Geometry.

The Reports during the period, 1877 to 1902 do not vary greatly, indicating that there existed in Sunderland the Central School , offering day and evening classes with a strong Art bias, and a number of classes, attached to miscellaneous institutions such as voluntary schools, Board schools, Private schools, Co-operative Societies, Church Institutes and the Y.M.C.A catering for a greater number of students wishing for evening Science courses. (15)

After 1885, the history of the Central School can be followed in greater detail from the Minute Books which exist. The School, situated at 27,Fawcett Street, was run by a voluntary committee of local businessmen of whom Mr T.W.W. Backhouse and Mr. W.Mills Roche were to play important parts

in the establishment of the Technical College. The Head - master was Mr. Cosens-Way, who held South Kensiggton Certificates for both Art and Science and whose salary in 1886 was £161.17s.6d. (16) He was helped by two assistants (part-time) who received £30 and £15 per annum. The work of the school was chiefly of an artistic nature and its income came from South Kensington grants, fees and a grant from the Corporation (17) The majority of the students were girls ,65%, who attended the day classes whilst the evening classes were chiefly attended by males.

In 1890, Mr. W.Cosens-Way resigned and was replaced by Mr.John Woodhouse Stubbs, headmaster of the Hawick School of Art (18) who was highly qualified and had the reputation of phenomenal success with his former pupils. His staff of four were still part-time, taught 250 students, classes being held every morning from 10 a.m. to 12, 2 p.m. to 4 p.m. on Tuesday and Thursday afternoons, and on Saturday from 10 a.m. to noon and from 2 p.m to 4 p.m. Evening classes, held on- Monday, Wednesday and Friday were from 7 p.m. to 9 p.m. (19) By now, the premises in Fawcett Street were most unsuitable and were described by a Government Inspector " as most inadequate for the purpose, and a discredit to the town".(20) Largely due to the work of Councillor Roche and his

committee on May 16th. 1891, it was resolved that subject to certain conditions, the Government School of Science & Art could have the use of four rooms on the second floor of the new Town Hall plus a continual annual grant of £30 (21) The cost of equipping these new buildings was £479. 16s. 2d. of which £69. 12s. 2d. was received from South Kensington, £153 was raised by public subscription and the remainder was borrowed from Mr. Backhouse's bank.

The Committee now decided to expand the activities of the School , increase the number of students, especially artisan students who would attend evening classes in Practical Design, and this increase in technical education would enable them to claim grants from the funds received by Sunderland Corporation under the Local Taxation & Customs & Excise Act of 1890 i.e. Whiskey money. The headmaster was to be helped by the appointment of an assistant, Mr.Herbert A.Lawson at a salary of £100 (22) who was a specialist in design, geometry and building construction. However, he differed with Mr.Stubbs, was replaced in January, 1892 by Mr.Edwin Brown and the school continued with its emphasis on Art Education, as can be seen from the number of prizes and passes listed in the local press. Although under Mr. Stubbs, the School prospered academically its financial position was precarious. This was solved by it

ceasing to be a private enterprise, controlled by a committee of local businessmen and on March 15th.1894 the School Committee agreed to a proposal from the Council that " for the future, the School committee shall consist of nine members of the Town Council plus nine other gentlemen" (23) and it should receive financial assistance. In October 1894, the first payment of Whiskey money was made and control by Local Government began.

In his Thesis on Technical Education, Mr. Hall states that at that time " There were eight evening classes and these, together with the Central School, had a total of 1523 students - 1039 for Science and 484 for Art. Further analysis shows that of the Science students, 618 were attending classes housed in Board Schools, 367 were with private institutions, such as the Y.M.C.A. and Co-operative Society, and 54 were students of the Central School." Concerned with the affairs of the institutions mentioned, would be the Education Dept., and South Kensington at National level; at local level, the Sunderland School Board, the Sunderland School of Science & Art Committee, the Managers of Voluntary Schools, the Education Committee of the Co-operative Society, the Y.M.C.A. and after 1892, the Corporation. (24)

On the 6th.October, 1892, the special Sub-committee

of the Council, whose task had been to give advice on the spending of "Whiskey Money", was formally constituted as the Technical Education Committee with the specific object of "advising the Council how the Local Taxation money could be applied for the purposes of Technical or other Education in the Borough." (25) Nothing much was heard of the activities of this Committee until 7th. Feb. 1894, when its new chairman, Councillor Wilson Mills Roche, an influential local solicitor, presented its Report to the Council. This Report suggested that a municipal college could be built and equipped at an estimated cost of about £15,000, without recourse to the Rates (26) since the money would come from "Whiskey Money" and local philanthropists. It also suggested that the Technical Education Committee be reconstituted and enlarged to include representatives of local industry as well as members of the Council. As a result of this, Dr.Gordon Bell, of whom much will be heard later, was included on the Committee. He had only come to Sunderland, having had a distinguished career in Arts and Medicine at Glasgow University and had also made a study of Technical Education on the Continent, in particular, of the Technische Hochschule at Charlottenburg. Dr. Bell, along with Councillor Roche, were to become the principal

advocates for the establishment of the Technical College, and Dr. Bell was the most important influence in establishing and maintaining the Day Training College. The new Committee did little until the 10th.June 1896, when Councillor Roche reported to the Council and recommended that the new College be built on a site on the Green, Bishopwearmouth. (27) The cost in round figures was; site - £3,300; original building and equipment - £24,500 (28) This was much greater than originally expected but came from the accumulated "Whiskey Money", which amounted to £18,000, and by a loan of £10,000 (repayable in 30 years) which was raised on the security of the Borough Fund in accordance with a resolution of the Council, passed after a great struggle , in January 1898. Much of the later equipment was provided by money given by Councillor Roche's influential friends. In May,1901, Mr. Branford was appointed first Principal of the new College (29) which was opened on the 13th.September by Mr. Samuel Storey, formerly Mayor of Sunderland and a Member of Parliament for the Borough.

From the very beginning, it was the intention of the Technical Committee to establish and maintain very high standards for their College. This is well illustrated by the continual references in the first four volumes of the

Minutes of the Higher Education Sub-committee to developing an Institution of University College standard. This can also be seen in the first prospectus which stated that the College intended:- "To provide higher education for persons of both sexes and all classes, both by day and evening instruction; and, in particular, to provide instruction by lecture, laboratory or seminar, or any other means deemed proper, in such sciences and arts as are applicable and ancillary to the manufacturing, mining, engineering, shipping, agricultural and other industries of Sunderland and its environments; to establish a commercial department in which a broad training may be given to those engaged in, or about to be engaged in, the various administrative duties of commerce;to establish a training department for teachers; to establish a department in domestic economy and in such other subjects as are particularly appropriate to the higher technical education of women; to promote a harmonious and thorough correlation of educational objects and means, adapted to the needs of the district between the College itself and other existing bodies and institutions."(30)

This last was to be achieved, firstly by organised courses of study, the elementary instruction for which should be provided by approved institutions already existing and the advanced instruction for which should be provided by the

College. Certificates were to be granted of such classified grades as then were deemed advisable and every effort was to be made to achieve recognition for the certificates by the manifold bodies representing local industrial, commercial and domestic interests. (31)

To carry out these aims in October, 1901, when the college first begen to function, there were five departments; Mathematics and Mechanics, Physics and Electrical Engineering, Chemistry, Mechanical and Civil Engineering, and Commerce and Modern Languages, all under very well qualified men with very high academic qualifications. These departments were to offer to day students, courses of three or four years duration , leading to Associateships of the College in Engineering, Pure Science and Commerce. (32) Evening students were offered four year courses leading to College Certificates of Proficiency in Engineering, Commerce and Plumbing. Students were also offered facilities to prepare for Board of Education (science and art) Certificates in subjects such as Mechanics,Electricity Chemistry, Building Construction, Steam Engine and Naval Architecture. In addition, Principal Branford began a series of lectures for teachers on Saturday mornings on "The Aims and Methods at Present in Vogue in the Teaching of Mathematics." (33) During the first session there were 671 evening students and 30 day students. These were chiefly concerned with Mechanical

Engineering, Electrical Engineering, Languages and Commerce, and Mathematics. Art teaching was continued in the Town Hall as part of the Technical College.

As a result of the Education Act of the 20th.December 1902, on the 30th.June the School Board and the Technical Education Committee terminated their duties, being replaced on the 1st.July by an Education Committee. This Committee was a representation in miniature of the Council plus co-opted members and it divided into four Sub-committees - Elementary Education, Higher Education (Secondary and Technical), Work and Finance. All of these Committees had to report through the Education Committee to the full Council who made the decisions and retained power.

The Higher Education Sub-committee had its first meeting on July 23rd. and elected Dr.Bell to be its first chairman. It then split itself into two minor sub-committees - one to be Governors of the Technical College and the other to control the Higher Grade School and Pupil Teachers' Centre. At a later meeting in September, the Higher Education Sub-committee at once attempted to impliment the former Technical Committee's dream of having a Municipal College of University standard. All Higher Education in Sunderland i.e. all education above elementary level was to become part of a

unified structure with the Technical College at the summit. (34) The Principal of the Technical College, Mr. Blanford, was appointed Director of Higher Education in Sunderland. He had to supervise the activities of the Technical College, the School of Art in the Town Hall, the Higher Grade School and its Pupil Teacher Centre. This was one more step towards the fulfilment of his often spoken ambition to create a University College and not merely a Technical College specialising in Engineering. An establishment where quality was more important than quantity. Frequently Mr. Blanford had criticised the standard of elementary teaching in Sunderland especially that of the teaching of English and Mathematics, and a more effective way than his Saturday morning classes, to improve teaching, was to develop a Teacher Training Department, or as he preferred to call it, a Department of Education, as part of the Technical College. These plans, however, had to wait until 1967. First, the Higher Grade School, renamed the Bede Collegiate School was re-opened as a Secondary School by Dr, Gordon Bell on September 26th.1906, and, under its headmaster, Mr.G.T. Ferguson, it developed independently of the Technical College, as a typical Grammar School, preparing its pupils for the professions, university and commerce.

Proceading with plans for a Department of Education, a confidential report dated March, 1906, stated that work done in the Technical College had already been considered of University College standard, and as this was an essential condition for the recognition of a department for the training of teachers, there were strong hopes that this would be established. There was also a report prepared by Mr.C.Readdie, M.A., Head of the Commerce Department, of which there is a copy in the Appendix, as it is interesting to see the requirements, needed to establish a Training College at the beginning of the 20th.century. After considering After considering these reports, an invitation was sent to Inspectors of the Board of Education to meet representatives of the Local Education Committee with a view to discussing the formation of a Teacher Training College and its relation to the Technical College. (35) The Board of Education, whilst being in favour of the setting up of a Day Training College, would not sanction it being attached to the Technical College. It chided the Education Authorities for leaving the position of Principal of the Technical College (vacated in 1905 by Mr. Blanford when he became a Government Inspector) unfilled for such a long period and advocated the development of Technical College, Day Training College and School of Art

along separate independent lines each with its own Principal and Governing Body.

Accordingly, it is now appropriate to consider the development of each, separately. (36)

Chapter 4

Background to Teacher Training in England and Wales.

In 1840, David Stow, inspired by the work of Wood, Bell and Wilderspin, wrote in his "The Training System" :- " an apprenticeship is as requisite for the profession of the schoolmaster, as that of any other art, and it appears extraordinary, that while we would not employ a gardener or mechanic who has not been trained, we should employ young men to experiment upon our children, who, however well informed themselves, have yet to acquire the art of communicating their knowledge to others." Stow realised that training implied far more than either teaching or giving information and devised a system which would be " applicable not merely to the head of the child, but to the whole man - the moral being - a training up of the child in the way he should go in his habits of thinking, feeling and acting."(1)

To further this end Stow devised his Normal Seminary or Training College which he claimed was the first institution of its kind in Britain.

At about the same time in England, Dr.Kay, a Manchester physician, and a great believer in the value of

schools, libraries and Mechanics' Institutes as a means of improving the social life and conditions of the working classes, with the help of his friend, Mr.Tufnell, opened a training college in an old manor house in Battersea. This was a residential college and was a drain on the time and financial resources of Dr.Kaye and his friends. By 1842, the deficit was over £2,000. To put it on a sound financial basis, it was handed over to the National Society in 1843 and this stimulated the Church so that by 1845, the Church of England had built twenty-two training colleges, containing approximately 540 students. Because of his excellent work and all-round experience in education, Dr.Kaye (after his marriage Dr.Kaye-Shuttleworth) (2) was appointed Secretary of the Select Committee of the Privy Council and he considered his most important aim to be that of improving both the supply and training of teachers. In the Minutes of 1846, his scheme of training was announced and formed the basis of training until the 1902 era. He was responsible for the pupil-teacher system. Schools sanctioned by the Inspectorate were recognised as suitable for training teachers who began their five year apprenticeship at the age of 13, receiving £10 per annum, rising by annual increments of £2. 10s. 0d. to £20 per annum. The Headmaster had to give the pupil teachers (1 pupil

teacher per 25 scholars) 1½ hours instruction each day for which he received £5 for 1 pupil teacher, £9 for 2, and £1 for every additional one.

After five years' apprenticeship, the pupil teachers sat the Queen's Scholarship and successful candidates were awarded exhibitions to the value of £20 or £25 at a training college, whilst unsuccessful ones received preference in minor appointments in Government service as clerks. Annual grants were also made to training colleges for each of the three years training. Great things were expected from this scheme: in the Report of the Board of Education 1912- 1913 .. p p 15-16 " Every boy of character and ability who is first among his fellows may select this career and in the majority of cases will do so. In his whole course he will be in vigorous competition with pupil teachers of other schools, and thus the Queen's scholars, after a public trial, who are selected for admission into the Normal Schools, will be naturally the most gifted, and by persevering application, the best instructed and most skillful youths which the elementary schools of the country can rear..... Their skill in conducting a class will have been developed by five years' experience as assistants in a common school.... The Normal Schools, therefore, will be fed with a class of student much

superior to that which now enters them. " (3)

These high hopes were not fulfilled. Instead of going for a three years' course in a training college many pupil teachers left the profession after their apprenticeships or remained as uncertificated teachers. Of those going to a training college, few stayed more than a year, leaving again as uncertificated teachers. In spite of the Committee of Council offering twice the grant for the completion of a third year of training, this was taken up by only a small number of students. Thus, in 1856, the Education Department fixed the training college course at two years, permitted youths above 18 years of age to sit the Queen's scholarship without having served an apprenticeship and the "Pledge" was introduced. This pledge, signed before witnesses, expressed the intention of entrants to a training college to become teachers in a recognised school. Students in a training college had to spend 150 hours in practical teaching, attend courses in professional training and acquire an academic background. (Since the pupil teachers had left the elementary school at 13, much of this academic work was that now given in the secondary school.)

In the first year of college, courses were given in reading, recitation, arithmetic, music, English grammar

literature, geography, history, school management, and boys were offered mathematics, whilst the girls did needlework. The second year was similar, except science, political economy and languages replaced certain sections of the first year work. Capable students could take the examinations of the Science and Art Departments, but everyone was expected to teach all the subjects of the elementary school curriculum. At the end of the two years' course, before receiving his certificate, the student had to satisfy an inspector as to his teaching ability by giving a lesson. He was also tested in reading and recitation. (4)

This system was a great improvement on what had gone before, but it had its limitations which were brought before the Royal Commission of 1886 under the chairmanship of Lord Cross. Witnesses before the Commission complained that the denominational tests most colleges had, would debar some promising candidates. A great critisism was the limited experience and lack of social opportunities offered by this system to students who attended elementary schools, taught in elementary schools as pupil teachers and on school practice, taught the rest of their lives in such schools and therefore never had much opportunity for broadening their ideas or coming in contact with people of different professions and backgrounds. The training college staff also suffered from

in-breeding, especially in women's colleges where able students, were sometimes offered posts as Junior Lecturers, and thus taught within narrow limits almost cut off from other educational thought and experience.

The majority report of the Gross Commission suggested the foundation of non-residential colleges and day training colleges attached to University colleges. The minority report favoured, in addition, the setting up of day training colleges under local authorities aided by local rates. It favoured residence and hoped that boarders would be catered for by the day training colleges.

In 1890, the Education Department's regulations for the administration of grants to day training colleges favoured the majority report. Day training colleges, to which day students, restricted to a total of 200, could attend, were attached to Universities and University colleges. Selected students could take a third year of training and ultimately were allowed to read for University degrees, the Education Department accepting the University examination as its own equivalent. As a result, day training colleges were established at King's College, London, and Owen's College, Manchester for men, Mason's College, Birmingham for women, and Durham College, Nottingham University College and Cardiff for both sexes. Between 1890 and 1900, sixteen such colleges

became an integral part of the Universities, widening the contacts and intellectual backgrounds of potential teachers. However, the failure rate was high. In 1899, 252 students from day training colleges and 467 from residential colleges presented themselves for University degrees and 185 day and 217 residential students were successful. (5) This was due partly to the students being intellectually incapable, but chiefly because apart from the three years' work in academic subjects, the student teachers had to take professional courses and complete their practical teaching at the same time. This criticism is sometimes made at the present time with regard to students attempting the degree of Bachelor of Education. One solution was the introduction of a four years training course.

The Cross Commission criticised the pupil teacher system, declaring that pupil teachers taught badly and were badly taught. The Board, therefore, modified the system and raised the age of entry from 13 to 15, later to 16. To prevent cramming for examinations and to ensure a more liberal education, the pupil teacher had only to spend half his time in school teaching and observing teaching, the rest to be spent in a Pupil Teacher Centre which might be attached to a secondary or higher elementary school. Only schools approved by an Inspector could receive pupil teachers and a

limit of four was imposed. (6)

The 1902 Education Act opened a new chapter in the history of English Education in general and that of secondary education in particular. This Act created Local Education Authorities, provided " a ladder from the elementary school to the University," co-ordinated all forms of education, elementary, secondary and higher, and emphasized that the provision of secondary schools also entailed a marked increase in the number of teachers' training colleges and opportunities for the development of evening and technical instruction.

In July 1903, the Board issued new pupil teacher regulations taking into account the increasing tendency, since 1890, for pupil teachers to receive their education at pupil teacher centres and that by 1900, the secondary schools were increasingly used for instructing pupil teachers. The pupil teacher was still an important part of the educational system, but the Board was most concerned that the potential teacher received a sound general education and that Local Education Authorities should provide a well organized system of scholarships. Local Education Authorities were also encouraged to experiment with various methods of using and educating the pupil teacher. By 1907, many pupil teacher centres had closed down, their pupils transferred to secondary schools or had themselves become secondary schools. The Board had changed its

mind as to the value of the system and asked " whether pupil teaching is worth keeping in existence at all, whether continuous contact with the child mind .... is worth struggling for at the cost of disorganization of the secondary school and the overwork, dissipation of energies, and in many cases neglect, which are too often the result of the half-time system to pupil teachers themselves." (7) From the time of Dr.Kaye-Shuttleworth, the pupil teacher system had been the chief source of recruitment to the profession, the easiest method of obtaining a higher education open to the working class child. Now it had lost favour with the Board which preferred the new system of offering bursars to secondary pupils over the age of sixteen, to enable them to continue their education until they either entered a training college or became a student teacher for the year prior to entering college. Extracts from the Regulations which applied to Bursars and Student Teachers are given in the Appendix.

The first effect of these new regulations was a decline in total entrants to the profession, to less than one third of the 14,000 which the Board estimated would be needed in 1909. From 11,018 in 1906-7, the number of entrants (pupil teachers and Bursars) declined to 4,308 in 1912- 13. (8) The whole existence of the educational system was threatened and a barrier set up against the entrance of working class children,

especially boys, into the profession.

The Board's activity in regard to training colleges was now concerned with enlarging their number and enabling more teachers to be trained. A new type of college, the " " municipal day training college ", developed by L.E.A.s, was recognised by the Board, who gave encouragement in the shape of a 75% grant. Later the grant was extended to cover the erection of hostels. The first L.E.A. day training colleges were at Sheffield, Hereford, Avery Hill, Leeds, Bingley and Swansea, and by 1938 there were 28 colleges provided by local authorities, some wholly residential, others partly and some non-residential. (9)

The Board also had tightened its control over the training colleges by means of the 1904 Training College Regulations. Standards of the staff had been raised, the curriculum widened and increased, emphasis being placed upon the professional training of the intending teacher. 'Model' schools had been placed under the control of the L.E.A. by the 1902 Act but a regulation of 1909 required every training college to have a demonstration school. Hygiene, physical training, art, handicrafts, gardening, music and needlework (for women) were introduced into the curriculum and since it was difficult to assess the students' progress in some of these by means of written examinations, standards were

maintained by means of Inspectors' visits. Final examinations were also set by the Board.

The period between 1902 and the outbreak of War in 1914 had thus seen the complete transformation of the method of recruitment to the profession and its training. Some of the chief problems were to increase the State's grant towards education without it becoming too centralised, to secure a balance between the over-supply and the under-supply of certificated teachers, to increase salaries and yet effect, economies, and to remove the " supplementary " (ex-Article 68) teachers from the profession, without causing too much hardship.

After the War, 1919, there was a grievious shortage of teachers, which added to the many difficulties of implementing H.A.L.Fisher's Education Act of 1918. Mr.Fisher realised the importance of attracting to the teaching profession, the right type of person and that this was virtually impossible with the salary scales then being offered. He was aware that teachers themselves were warning off entrants. Accordingly, in 1919, the Burnham Committee was constituted, to be the negotiating body on a national scale for teachers' salaries. This committee was composed of representatives from the Authorities and teachers, under Lord Burnham.

In November, 1925, the Board proposed to end its function as an examining body and in future, endorse qualifications granted by responsible academic bodies, such as Universities. Also, it intended to abolish the Acting Teachers' Examination. Indeed in 1930, important modifications of the whole teacher training situation took place, which foreshadowed future developments. The Training Colleges were organised into eleven local groups around the local University or University College of their region, the intention being to develop closer relationship between the Universities and Training Colleges. This was to be done by Joint Examination Boards and Boards of Studies, containing representatives of each University and the Training Colleges, which drew up and approved syllabuses and appointed examiners. After 84 years of government examinations, in 1930, certificates were awarded for the first time under this new system. Although divested of its functions as an academic examiner, the Board retained the right to examine practical teaching, physical training and other practical subjects. This system existed until after the War of 1939-45 which naturally brought much dislocation. Training Colleges were taken for military purposes: e.g. City of Leeds Training College once again became a Military Hospital: St.Paul's, Cheltenham, sent their second year men to St. John's, York, to be followed in 1941 by men from the

College of the Venerable Bede, Durham. When the War ended one of the chief problems was the serious shortage of teachers (the Minister estimated a need for 70,000 - other sources suggested a shortage of 120,000). One of the methods to cope with this , was the Emergency Training Scheme (10) whereby men and women from various forms of National Service could take a one year course of intensive training, followed by a course of directed reading to improve their academic background. Out of 124,000 applicants, 54,000 were accepted for training, approximately 12,000 women and 23,000 men ultimately became teachers. (11)

For possible solutions to the problem, the Government set up a Committee, under the Chairmanship of Sir Arnold McNair " to investigate the present sources of supply and the methods of recruitment and training of teachers and youth leaders and to report what principles should guide the Board in these matters in the future." (12) In 1942, this Committee heard the views of the teachers' organisations, the more important of which were:-

a.) That in the interests of a unified educational system and a united profession, it is essential that every teacher should be of graduate status and trained.

b) Training courses should be varied, but in no case should the full course be less than four years.

c) Every Training College should become an integral part of a University and should provide an alternative but equivalent form of training to that followed by the student working for a degree.

d) The degree taken at the end of such a course should be an award of the University.

e) Students who are taking University Degree Courses should receive their professional training with other students in training for the teaching profession.

f) The teachers' qualifications carrying recognition to practise as a teacher should be awarded on the satisfactory completion of such courses.

g) No teacher should be so recognised before his twenty-first birthday. (13)

In its report in 1944, the McNair Committee suggested that the Joint Board System had not brought about the effective co-operation between the Universities and Training Colleges, nor even between Colleges themselves and should therefore, be replaced. It proposed the establishment of a Central Training Council for England and Wales, of three or five members who should advise the Board of Education about the form of training service that should be adopted. The Committee also wished to establish Area Training Organisations but was divided as to their form. Oneesuggestion, Scheme A, was the

establishment of Institutes of Education which will "demand of the Universities a richer conception of their responsibility towards education: it will also involve additional staff, both teaching and administrative. On the other hand we are not proposing that the Universities should burden themselves with detailed administration, but rather that they should accept responsibility for the general supervision of the training of teachers and that in the task they should have the active partnership of those already engaged in the work and of those who aught to be engaged in it."(14) Scheme B and its modifications called Scheme C were based on the extension and development of the Joint Board System. ~~At first~~ At first, the Universities favoured Scheme B and C, whilst Local Education Authorities preferred Scheme A but eventually the majority, including the University of Durham chose Scheme A. Bristol, Birmingham and the University Colleges of Nottingham and Southampton formed their Institutes in 1946 and by the next year most of the remaining Universities followed suit. Needless to say, the Institutes of Education differ widely in their organisation and functions. Some cover larger areas, whilst others contain greater numbers of member institutions. In some, the Director of the Institute is Head of the University Education Department , but in most cases the posts are separate. The Institutes of Education have two main functions.

First, to co-ordinate the provision for the training of teachers and second,to provide facilities for study and research in the field of education. As the Area Training Organisation, it awards certificates in Education to successful candidates and recommends them to the Department of Education and Science for the status of Qualified Teacher. To facilitate its second function, the Institutes should have a full-time teaching staff working in suitable buildings, equipped with a library and lecture rooms. Thus equipped, the Institutes can offer refresher courses to teachers; award diplomas for work done with handicapped children, or immigrant children or in primary and secondary education; and enable educationalists to work for higher degrees in Education, by either full or part time courses. Given below is the statute for the Institute of Education of the University of Durham, which amply illustrates the conditions under which one of these bodies functions:

1) There shall be within the University an Institute of Education, the purpose of which shall include:-

a. The promotion and co-ordination of the initial education and training of teachers in the University Department of Education and in the Training Colleges and other institutions which are,or may become, members of the Institute; and the training therein of other persons intending to engage in educational work;

b. The provision of courses of further study for practising teachers and other persons concerned with education;

c. The promotion of research into, and the further study of education;

d. The provision of a centre of interest and study for practising teachers and others concerned with education;

e. The assessment of the initial and further education and training of teachers, and others engaged in educational work, and the award of certificates to those who successfully complete courses;

f. The recommendation of students who have successfully completed the appropriate courses to the Minister of Education for the award of the status of qualified teacher.

2) The Institute shall be governed by a **Delegacy** and an Academic Board. The membership and powers of the governing bodies of the Institute shall be determined by the Council except as provided in these Statutes.

3) There shall be a Director of the Institute, who shall be the chief academic and administrative officer of the Institute and shall be appointed by the Council, on the recommendation of the Delagacy, and after report from the Senate.

4) The following shall be the original constituent members of the Institute:-

a. The University Department of Education:

b. The following institutions, subject to their complying with the conditions of this Statute:-

The College of the Venerable Bede.

Darlington College of Education.

Nevilles Cross College.

St. Hild's College.

Sunderland College of Education.

Sunderland Polytechnic.

Teeside College of Education.

Middleton St. George College of Education.

5) The Council may, in agreement with the Minister of Education, admit other institutions as constituent members of the Institute. Any institution so admitted shall be represented in the Delegacy by the Principal or Head of the institution, and one member of the governing body of the institution. The governing body of any institution so admitted shall agree, as conditions of membership:-

a. To appoint to its governing body one person nominated by the Delegacy;

b. That the Delegacy of the Institute shall have power to appoint persons to visit the member institution. Any report by such visitors shall be submitted to the

Delegacy and the governing body of the constituent member.

6) The Council may also admit as associate members of the Institute such other institutions as engage in the training of teachers or other educational workers, but with the examination of whose students for their initial qualifications as teachers the Institute is not concerned. The conditions of such membership shall be determined by the Council on the recommendation of the Delegacy.

7) The constituent membership of any institution may be terminated by twelve months' notice given by the Delegacy or by the governing body of the institution, subject in the former case to appeal to the Council of the University.(15)

In an attempt to cope with the teacher shortage, the McNair Committee recommended; that salaries should be improved and be based on age and previous experience, thus making the profession more attractive to mature students. Also, salaries should have a basic scale applicable to all types of schools, special qualifications and experience rewarded by additional increments at the minimum and maximum of the scale.(Mature students now leave College and commence work on almost their maximum salary). Special allowances should be paid to teachers holding posts of responsibility.(The working of this has caused much controversy between primary and secondary schools and also within schools themselves.) The "pledge" system

under which entrants to training colleges and universities declared, in writing, their intention to enter the profession should also be discontinued.

The McNair Committee, in concluding its report had attempted to answer the question: "Will there be available, when they are needed, a sufficient number of teachers of the right quality ?" They had replied that " we must rely upon the greater attractiveness of teaching as a profession and upon ample facilities for training" and referred to "three necessary means of making teaching more attractive; an improved salary system affording higher remuneration; better school buildings and other school amenities; and smaller classes in all types of school." (16) In spite of adopting many of the McNair recommendations and making the profession more attractive, the teacher shortage continued to be in the nature of 7,000 per year throughout the 1950's, the most serious shortage being that of science and mathematics teachers. The reasons for this teacher shortage can be seen in the post war attitude to education, and the new developments in the field of education, which have followed one another with startling rapidity.

The general public has become more interested and concerned with education. Great attention is given to it in national and local newspapers, radio and television devote much time to it, and educational items always appear on the

agendas of the various political parties' conferences and trade union conferences. Parents are concerned that their children should have the best opportunities to have a full and productive life, and the nation realises that, in the present economic climate, our future as a nation depends largely on the progress made in schools and in the fields of Higher Education. The White Paper of 1958 noted that since the school leaving age had been raised in 1947 to fifteen, more pupils were staying in all types of secondary school after the statutory leaving age. Between 1947 and 1958 the number staying at school after fifteen had risen from 187,000 to 290,600,not only the sixth forms of the grammar schools being doubled but the number staying in modern secondary schools after the age of 15 had increased to 38,000. This desire for education also showed itself in higher education; in technical colleges full time students had grown from 47,000 to 76,000 and part time day students had also increased from 220,000 to 470,000; whilst University students were double those attending pre-war. Evening students had also increased in number over the ten years by half a million to two million. (17)

Such rapid developments obviously needed teachers; during the ten years the number of teachers had grown by 85,000 to a total of 260,000. This was not satisfactory,however,

because the annual shortage during this ten years was about 7,000, the most serious being that of science and mathematical teachers. In spite of this annual shortage of teachers, the Government, realising the vital need for well trained teachers, introduced the three years' course into training colleges, in the Autumn of 1960. It was hoped that this extra year would enable the student teacher to study his main subject and education to much greater depth. This increase in training by one year meant that virtually no teachers entered the profession that year and it was planned to increase the available places in the teacher training colleges by 12,000 by 1962, (18) Indeed, from 1960 onward, the whole history of training colleges is one of change, experiment and of continual expansion. This decade also saw the publication of several reports on education which have had a profound effect on teacher training. These are the Crowther, Newsom, Robbins and Plowden reports. In March, 1956, the Central Advisory Council for Education was requested by Sir David Eccles, then the Minister of Education, to advise him on the education of boys and girls between the ages of fifteen and eighteen. The Chairman of the Council gave his name to the report which was published in 1959 and 1960; and the Crowther is a most complete survey of education of the

older adolescent. Volume 1 contains the main report and Volume 11 consists of a number of special surveys; social, National Service and Technical Courses. The main report consists of seven sections, entitled 'Education in a Changing World,' 'The Development of the Modern School', 'Secondary Education for All' 'The Way to County Colleges','The Sixth Form', 'Technical Challenge and Educational Response', and 'Institutes and Teachers'. Most of the report lies outside the scope of this chapter, its impact upon Technical and Further Education being dealt with in Chapter 8. The Crowther Report did emphasize the need for more teachers, drawing attention to another " bulge " to come in the early 1970's, advocated the raising of the school leaving age and the opening of County Colleges. Estimates in 1959,when there was a teaching force of about 326,000 teachers, as to the number of teachers required varied, but generally speaking an increase of about 94,000 would be needed , giving a deficit in the 1970's of about 40,000-50,000 teachers. This shortage was due to several causes, namely the extra year, and although the 1944 Act stated that marriage would not disqualify a woman teacher from continuing in the profession, changing social patterns resulting in earlier marriage and child bearing resulted in a loss to the profession (sometimes temporarily) of married women. Also

in spite of several new salary scales, industry, commerce and local government could still offer more attractive opportunities to men, especially graduates in mathematics and science, than could teaching. To cope with this shortage the Ministry, as mentioned, decided in 1958, to increase the capacity of the training colleges by 12,000 places. This was to be done by enlarging the voluntary and L.E.A. training colleges and building new ones at Nottingham, Walsall, Cardiff and Brentwood. Voluntary Colleges were enabled to expand by means of a 75% Government grant towards the cost of new Colleges, and also an increase in the Capital Expenditure Grant to 75%.

By 1963, the Ministry came to the conclusion that the number of students in training colleges would have to be still further increased. The success of the City of Leeds' experiment in providing a training college whose purpose was to meet the needs of older mature students, whose family commitments prevented them from entering a residential college, encouraged the opening of other day colleges. One in Newcastle and another in Middlesbrough, in particular, have proved very successful. Other colleges have expanded by means of overcrowding, many colleges for women students have taken in men e.g. Sunderland, and colleges for men students have

taken in women e.g. St.John's, York. Residential colleges have taken in day students and day colleges provide lodging facilities. By these methods, the training colleges adapted themselves to the needs of the times.

In 1963 came two further stages in the revolution in English Education with the publication, in August, of the Newsom Report, and in October, the Robbins Report. Mr.(now Sir) John Newsom,C.B.E. formerly Chief Education Officer of the County of Hertford, became the Chairman of the Central Advisory Council for Education in 1961, and his committee was given as its terms of reference "To consider the education between the ages of thirteen and sixteen, of pupils of average or less than average ability, who are or will be following full-time courses either at school or in establishments of further education. The term 'education' shall be understood to include extra-curricular activities." The report of two years' work, surveying secondary modern and comprehensive schools, and interviewing over 6,000 pupils was entitled "Half our Future". Its revolutionary ideas would only be implemented, apart from the expenditure of much money, by the building of new schools which would, in particular, cater for the social needs of the older pupils, with new subjects and new techniques using new equipment. Also, its implementation would require adequate

numbers of teachers of the right type and training. Teachers would require either a more general education, be able to teach more than their main subject and, if possible, be able to offer subjects such as housecraft, handicraft, art, music, drama, physical education and outdoor activities. Newsom also recommended that the training of all teachers should include sociological and environmental studies with special reference to the problems of pupils in culturally deprived areas. Courses should also be provided for students wishing to enter youth and youth employment services or do social work. This report also urged that a training requirement for graduates should be introduced at the earliest practicable moment, quoting the statement of the eigth Report of the National Advisory Council on the Training and Supply of Teachers, "Here (in the primary and secondary modern schools) teaching methods and techniques with all the specialised knowledge that lies behind them, are as essential as mastery of subject matter. The prospect of these schools staffed to an increasing extent by untrained graduates is, in our view, intolerable." This reform, however, cannot be considered until the teacher shortage is overcome.

Of much more immediate effect on the Training Colleges were the recommendations of the Robbins Report. This was made by a committee under the Chairmanship of Lord Robbins,

appointed by the Prime Minister, and given as its terms of reference, "To review the pattern of fulltime higher education in Great Britain and in the light of national needs and resources to advise Her Majesty's Government on what principles its long-term development should be based. In particular, to advise, in the light of these principles, whether any new types of institutions are desirable and whether any modifications should be made in the present arrangements for planning and co-ordinating the development of the various types of institution." Robbins recommended that training colleges change their title to College of Education and the present federation of the Colleges and the University Departments of Education in the Institutes of Education should become Schools of Education, financed by ear-marked grants from the Grants' Commission. In addition to the three year course, a four year course leading to a professional qualification and a degree should be available for suitable students. After a successful four year course, students should be awarded the degree of Bachelor of Education, by the University with which the College was linked. Opportunities should also be provided for those with professional training who wish to proceed to a B.Ed. by full time or by part time study, after some years teaching. The committee also thought

that Colleges of Education should all have more than 750 students, should become constituent parts of a University or that some should combine with the larger technical colleges to form new universities. They also thought that during the 1970's, when the teacher shortage should be solved, Colleges of Education would be able to expand their curricula, by introducing courses serving as an entrance to a variety of careers in the social services, or general courses in the arts and in science subjects. Most of these recommendations were put into operation except that control of the Colleges of Education was not passed to the Universities, but remains with the Voluntary Authorities and L.E.A.s.

In 1966, in an endeavour to combat the teacher shortage and use fully the Educational facilities of the nation, an experiment was launched whereby five technical colleges were chosen to train teachers. Sunderland Technical college was one of the Colleges chosen and in 1967, a Department of Education was opened. It was left to the Departments concerned whether they opted to become members of the Local Institute of Education or use the facilities provided by the Council for National Academic Awards. As a result of the various methods adopted by Colleges to combat the teacher shortage, in 1968 there was an intake of 39,000

students, anticipating by three years the Robbins recommendations.

Meanwhile, the Government of Colleges of Education and student participation, have been some of the more crucial problems of recent years. The recent implementation of the recommendations of the Weaver Report has done much to solve these. The future will also probably see the Colleges of Education moving more into the orbit of the Universities and extending the scope of their work to include the training, not only of teachers, but also all forms of social work.

Chapter 5

Teacher Training in Sunderland. (1)

Political Background to the Development of the College between 1908- 1914.

From its establishment in September 1908, the welfare and fate of the Day Training College was influenced, indeed dominated, by three powerful bodies. There was the Board of Education and its Inspectorate, the Governors of the College acting through the Education Committee and the ever watchful and extremely vocal Rate Payers' Association.

The Board had very powerful weapons to back up its requests, chiefly its Regulations, which laid down that Annual Grants, Building Grants etc., were paid subject to the fulfilment of the requirements of those Regulations, and one of these requirements was (inter alia) that the premises and equipment must be approved by the Board. The Board had intimated every year that the temporary premises in Westfield House were unsuitable for the College and by 1910 were threatening to prevent admission of students from 1911 onwards.

Also, since the Board had intimated that the Westfield premises were inadequate, they required the fulfilment of the pledge given by the Council to provide efficient buildings. They could therefore refuse to pay Maintenance Grants in respect of

the existing buildings. Since the Grant was £13 per head, plus a proportion of the rent according to the estimate for the year 1910 this would involve a deficiency of £2,864 to be provided by the Local Authority. The Authority, as required by the Board, had also signed agreements with each student (i.e. 140 students) to train them for two years and it had entered into obligations with the staff of the College. A further pressure on the Council was its agreement to buy St. Bede's Tower. Since 14th. December 1909 (1) the Authority had been considering buying this building to use as a hostel for women students. This was to satisfy the Board's Regulation, stating that as a condition of recognition of the Training College after 1st. August, 1910, the Board would require to be satisfied that there was sufficient accommodation for women students in Hostels and that all women students not in a Residential Training College must reside in a Hostel or with their parents or guardians. After the Board's approval to the suitability of Bede Tower as a Hostel, received by the Governors on the 16th March 1910 (2), an agreement was entered into to buy St. Bede's Tower and 5,026 square yards of land enclosing it, for £2,850. However, by August, the Board was withholding its grant of 75% of the cost of buying Bede Tower until it was satisfied as to the suitability of the Council's plans to provide a new and adequate Training College with playing fields. The owner of Bede Tower, Colonel ~~Reed~~ Evans, was also demanding either that

the agreement be completed, or a monthly payment be made to offset his loss of interest for the capital sum involved. To look into the choice of a site and premises, a Sub-committee of the Works Committee and the Governors of the Day-Training College was formed. Its recommendations can be studied in the statement issued by the Education Committee to members of the Council and reported in full in the Daily Echo of the 12th. September,1910.This account was as follows;- " The Education Committee have issued to Members of the Town Council, a statement with respect to the provision of a Day Training College. The matter was before the Committee at its last meeting, when a recommendation was adopted in favour of a site in Durham Road. After mentioning that the College is necessary in order to comply with the requirements of the Board of Education, the Statement continues:- The experience gained in the past two years has enabled the Committee to formulate the requirements much more satisfactorily than could otherwise have been the case. Knowing therefore what to build, the important point to consider is where to build. Four sites have been considered, viz.

1. An addition to the Technical College.
2. Westfield House.
3. Bede Tower.
4. Durham Road.

As the Council has abandoned the idea of providing accommodation

in connection with the Technical College extension, it is not necessary to deal further with that site.

Westfield House. (the present temporary premises) can be acquired for £4,000 and it is possible, by careful planning, to get on the site all the necessary buildings, but not to satisfy other accurate requirements as hereafter stated. The present building would require to be removed entirely. Some difficulty has occurred in getting exact information as to the average cost of building a Day Training College, but the figures given later will be found approximately correct.

Bede Tower. The vacant ground being infront of the house, it would seriously detract from the convenience of the place for hostel purposes to build the College on it. It is possible it could be done with careful planning. In this instance also, the accurate requirements cannot be given on the site.

Durham Road . This site is between Low Barnes and Ivanhoe Crescent with a frontage into Durham Road, and about 21 acres of land have been offered to us for £13,500. For College purposes alone it may not be needful to purchase so much land. It is assumed in the calculations that the owner will sell part of it at the same rate.

Playing Fields. The provision of playing fields is almost as pressing as that of buildings. It is required as a condition of grant that such fields be provided. The regulations state:-

' Whether the College is a residential or a day College, ample space should be provided for the purpose of recreation and organised games, such as cricket, football, hockey and lawn tennis. If adequate provision is made for this purpose, there will be required a site from 8 to 10 acres in all for a College of 100 students, or from 12 to 15 acres for a College of 200 students. In a College attended by both men and women, separate provision must be made for each sex, and the amount of ground required will be increased proportionately. The actual amount will vary according to the nature of ground levels etc. and the shape of the site, and a smaller site may be accepted where other provisions can be made for the students' recreation and games,or where a site of the full size could not be acquired except at a prohibitive price.'

It is , of course, obvious that the playing fields adjoining the College will be much more convenient than if some distance away, and also that the College buildings with spacious grounds attached are calculated to promote that tone so much desired in the students.

Financial Statement A financial statement is given showing the position in the event of any one scheme being adopted. Approximately, the income from grants and fees in respect of 150 students is put down at £3,450 and the expenditure at

salaries £2,598, apparatus, books etc. £220, rates, heating, lighting and cleaning £230 leaving a balance of £402 which is available for the provision of the necessary playing fields, interest and sinking funds and proportion of education office expenses.

In regard to the Westfield House scheme the purchase of the site is £4,000 and the estimated cost of the building £13,000 a total of £17,500 of which the Grant would pay 75% or £13,125, leaving to be provided by the College Authorities £4,375 in addition to the annual interest and sinking fund £195.

For the Bede Tower scheme, the estimated cost of buildings is £13,000, grant (assumed) £10,125, leaving the College Authorities to provide £3,375 and interest and sinking fund £150. 8. 9. The site is also required for hostel purposes and if the two objects were considered together the grant would be less.

As to the Durham Road scheme the figures are:- purchase of land (12 acres) at £650 per acre £7,800. estimated cost of preparing playing fields £675. estimated cost of preparing buildings £13,500. total £21,500, the grant would produce 75% i.e. £16,481 leaving the College to meet £5,494, annual interest and sinking fund £248. This is the only one of the four schemes which provides for playing fields. In other cases they would

be required to be provided separately."

The advantages and disadvantages of the different schemes were set forth in detail. In regard to Westfield House and Bede Tower, the disadvantages far outweighed the advantages but the Durham Road site had only one disadvantage, namely its distance from the station. On the other hand, it was pointed out that the amount of ground, the use of the ground and the open character of the neighbourhood made it easily possible to build a really adequate and suitable College. The advantages were (1) adjacent ground could be adapted for playing fields, (2) proximity to the Demonstration School, (3) the building could be more convenient since it could be constructed largely on the ground floor or in two storeys. This would involve a large saving., (4) the site was particularly suitable because of its distance from heavy traffic and other noise and because of its salubrious situation. (5) the distance from town would be an advantage from the point of view of tone and discipline and, further, the site had great possibilities including those of future extensions in any required direction."

In Volume 5 of the Minute Book of the Higher Education Sub-committee, there is a very brief paragraph for the meeting of the Day Training College Governors on 21st. September, 1910. " The Governors recommended the erection of permanent premises

for the Day Training College on the site at Durham Road." This decision ultimately came before the Council on the 14th. September,1910 and the Editor of the Echo writes:-

15th. September, 1910 -"After a full debate, the Sunderland Town Council on the 14th.September, approved a scheme for permanent buildings for a Day Training College and empowered the Education Committee to negotiate for a site in Durham Road. The objections to the scheme were very urgently stated. The chief grounds being that the ratepayers should not be committed to further large expenditure on education. That teachers are being manufactured too rapidly already. To this the reply was that there was an enormous number of applications from students anxious to qualify as teachers and that the Training College would involve no burden on the rates but would benifit the town by the expenditure of a large sum of money annually among local tradesmen."

On these points, the assurances given were very definite. Mr. Nicholson tells us that the College will be an asset of commercial value and Mr. Vint that it would be a calamity to the town if the College had to shut up. On the question of cost, Alderman Bruce was assured that the scheme would be self- supporting and Dr. Gordon Bell stated emphatically that the College would be self-supporting and

would be a charge on national funds and not on local rates. These gentlemen had evidently no fear of any unforseen change in the educational system falsifying their predictions. They had convinced the majority of the Council of the perfect safety of the scheme which had caused much uneasiness among the public and we trust for their sakes and the ratepayers' that the event will prove that they are right!"

This announcement, involving a sum of money as large as £8,000 to £13,000 created a public storm. Every day innumerable letters for and against the College appeared in the Press and not only the Press of Sunderland but also that of Newcastle and Darlington.

The opposition to the proposed scheme concentrated on three lines of attack:-

a. The political opposition stating that anything and everything attempted by the Council was usually ineffective, badly organised and always more expensive than estimated.
b. The ratepayers who were ppposed to any spending of public money with the rates standing at 1s.9d to the £.
c. The unemployed teachers aided nationally and locally by the National Union of Teachers' policy of cutting back recruitment to the profession.

A sample of typical letters to illustrate the public interest

and attitudes adopted, follows :-

Letter from a Poor Rate Payer. 3rd. September,1910.

" Is it not time that the people who pay the rates of the Borough would begin to interest themselves in the schemes that the Higher Education Committee are forcing upon the Town. This Committee talks about the need of a new College of Education as if the town was in the height of prosperity and the rate payers were the lowest rated people in the United Kingdom. No one disputes the benifits to be derived from Education but why should the rate payer of a working class community be called upon to give a College Education to the sons of people who can afford to educate their children to a higher social position than the ordinary rate payers can occupy or have any desire to fill. It is now time to speak plainly about this fad of a few Town Councillors and others who wish to pose as great Educationists, at other people's expense. It is all nonsence the Higher Education committee saying it is the London Education Authorities who insist upon the expenditure of £20,000 to provide a training college with playing fields for the boys and girls who wish to be teachers. The London Authorities say that if you have a Training College of your own then you must do as we tell you, but we do not insist upon you having such an Institution. Is there any necessity for the

Town to be called upon to spend about £50,000 for the new Bede Collegiate Schools and Training College with playing fields, for the use of young people who are being brought up as snobs with false ideas of their position and who think shame of the humble position of their parents. If some of the wealthy families of Sunderland would make a gift of £10,000 or £20,000 for Educational purposes then there would be an excuse for calling upon the rate payers to contribute to an increase of expenditure. But at the present commercial depression and the black look out in ship building and in the exportation of coal from the river, this is not the time for faddists to put their hands into the rate payers' pockets. I notice a sign of ignorance according to the needs of ideas of these would-be Higher Educationists to object to a College. The term sounds so fashionable and aristocratic that it requires a strong nerve to oppose the idea. The question we ought to ask ourselves can we afford it or is there any need for such an expensive luxury. "

Yours faithfully,

A Poor Rate Payer."

Many people replied to this letter, including Mr. James F. Burnicle, one of the leading educationists on the Council, who wrote on the 9th. September:-

Broughton,

Yorkshire.

Dear Sir,

I am having a holiday and do not want to spend it in letter writing but the Echo is sent me daily and I see in your edition of yesterday "A Poor Rate Payer" has been writing you suggesting that our Training College is a luxury we cannot afford.... The writer who, though he does not dispute that education produces benifits, must have come across some not very satisfactory pupils if he has met some (as I gather from his letter) who, because of their new educational opportunities think ' shame of the humble position of their parents' surely cannot mean to suggest the fault is in Education.

The Colleges are not to give educational advantages to one class above another, as your correspondent evidently wishes to suggest. Sunderland people know better than that.... but the Training College scheme for new buildings is now submitted, and as to it I would like to say.....

1. It is not a call on the Local Authority to spend £20,000.
2. Of the £20,000 the scheme will cost as a whole, the Government will provide three quarters of thes and the rest will be borrowed over a period of years.
3. The grants and fees from students who will come from all

quarters of the kingdom will provide an income sufficient to cover all necessary expenses, including interest on the Sinking Fund for redemption of Principal in respect of the College.

4. The cost to the town is not therefore increased one penny by the scheme but on the other hand the town benifits by having within its borders a new industry and don't we all want to see new industries established which causes to be expended within the town an annual sum of not less than £6,000- £7,000.

5. Teachers need places in Training Colleges to complete their professional training and the demand for such places is many times greater than supply, Here the Education Department encourages local authorities to undertake, under proper conditions, the management of Colleges and the Treasury provides funds fairly liberally for the purpose. The question is a National and not purely a local one and I trust there will be no hesitation in accepting the proposal now being made and if we don't do it, it will be done elsewhere to our loss. I am Hopeful that even our critics may have cause of pride that Sunderland Training College is to be established.

Yours etc.

James Burnicle.

The increase in Training College accommodation as a result of the 1902 Act (in 1903 there were 7,000 and in 1910 there were 12,000 places in the Training Colleges) meant that every summer saw a larger number of newly trained teachers available for positions and accordingly, many found it impossible to get work. From 1909 onwards the Unions, especially the N.U.T. were concerned to dissuade entrants to the profession and to demand a tightening up of staff regulations and a speedy removal of unqualified and partly qualified teachers. Some of their arguments have obviously influenced the writers of the next two letters, the first being concerned with the national, and the second very concerned with local, conditions.

From the Sunderland Echo, 13th. September, 1910.

Sir,

The letters which have appeared on the above subject have failed to give any definite figures on the out-of-works in the teaching profession. These figures are so striking that I am sure a perusal of them will show the ratepayers of Sunderland the folly of erecting a Training College here. On page 303 of the current number of 'The Teacher' is a three column article dealing with what is termed ' the great army of unemployed teachers'. So great is this army that an Organisation Committee has been formed to represent the 800 unemployed London teachers

alone. This Committee is doing everything in its power to secure work for those it represents, but have met with little or no success.

A letter from Sir John Gorst to the 'Times' is also given, dealing with the same subject, and our local teachers might do worse than send a copy of this letter to every member of our Education Authority. It would open their eyes, I think, to the folly of their present proposals.

The Joint Council of Ex-students of London County Council Training College for Teachers states:-'We have the names of some 1,200 capable and efficient college trained teachers who have been compelled by economic pressure to accept inferior positions at salaries from £30 - £45 per annum' They tell also of young men who have been trained as teachers who are driving cabs; and of young women forced to become waitresses in tea rooms, etc. The article also points out that ' there are 63,000 unqualified teachers in the public elementary schools of this country'- teachers who are neither certificated nor trained, and are therefore to be had cheap one must presume; while fully trained and qualified teachers by the thousand are vainly seeking situations and Sunderland proposes to add to this army of unemployed teachers!-

But the above is mild compared with a leaflet just

issued by the National Union of Teachers, a copy of which has come into my hand. It is headed 'Risks of entering the teaching profession. Costly training and then, no work. A warning to parents!' This leaflet shows in detail the cost to parents and the state of training a child for the teaching profession; points out the many chances there are of failure at the last moment through some trifling cause, and that too, when the student is at an age when he or she cannot very well turn to anything else.

But taking the successful students only, it shows that 4,384 teachers left the Training Colleges in July,1908. Three months later, 1,226 were without employment and twelve months later 259 were known to be out of employment. Of 4,386 students who left the Training Colleges in July,1909, 1,528 were still without employment in October,1909. The leaflet finished up with : 'Parents, do not, by want of forethought,ruin your child's whole life!' These striking facts and figures, issued by bodies of the teaching profession, should, one would think, be sufficient to deter Sunderland from adding to such disastrous results.

Yours etc.-

Thrift.

To the Editor

Dear Sir,

In connection with mass meeting of ratepayers to protest against the proposed Training College, I would like to suggest that all unemployed teachers in the district should make an effort to be present and get in touch with one another. At the recent Council Meeting one gentleman observed that there were plenty of places waiting for ex-students of Training Colleges, in face of the fact that there is an average of about one post vacant per fortnight in Durham County and about half a dozen per week in the rest of the country. Hundreds apply for one vacancy,,and it is obvious that though we may eventually be placed, we will have to wait months, and how are we to live in the meantime when even temporary employment of any sort is difficult to obtain. The following remedy seems to suggest itself:-

1. Local Education Authorities should open no new Training Colleges.
2. For the time at least, no more 'bursars' or 'student teachers' should be made.
3. All Training Colleges should be closed temporarily for one year so that the 'glut' in unemployed teachers may cease.
4. and 5. Recommended by the National Union of Teachers. The acting teachers' certificate should shortly be abolished,

and where really necessary classes in schools should be made smaller.

Yours, unemployed, etc.

One of the best of the many replies to these and other hostile letters was given by the Vice Principal of the Sunderland Day Training College, Miss Margaret Cussans, M.A. One can admire her courage for stepping into the arena whilst being an interested party, appreciate her logical presentation of facts but can query the tact of the first point given in her letter below. This section in particular, brought howls of protest from Sunderland teachers, especially in the person of Mr.John Wilkinson, President of Sunderland Teachers' Association.

Sir,

May I beg you to allow me to make a few observations through the medium of your paper on a subject being freely discussed in the town- that of the desirability or otherwise of a Training College in Sunderland.

The first point to be considered is :- 'Is a Training College necessary for Sunderland?' My reply to this is that in no place could one be more urgently required. The death rate here is very high. The infant death rate in Durham is much higher than that in any other part of England, and as

everyone knows, this means that not only are many citizens lost to the nation, but that the survivors are maimed and imperfect compared with children in more favoured districts. Specialists on the subject such as Dr. Eustace Hill, inform us that these deaths and this disease are largely due to ignorance or carelessness, or both, on the part of the parents. Since the wealth of a community is its output of good work, the latter depends on the health and intelligence of the workers. Surely nothing can be more necessary or important than to check this enormous wastage by every means in our power. First and foremost among these means is to teach the boys and girls, who will be the parents of the next generation how to take care of their bodies, both by teaching them simple laws of health and by giving them suitable physical drill. Whatever may be said to the contrary, those of us who go into school and talk to the children, know that at present, this is not being done effectively. The remedy is to teach the budding teachers and fire them with enthusiasm for the cause. This is the business of a Training College. Again, if good work is to be produced - and the future of Sunderland, as of any community, depends on this - the workers must have intelligence and 'grit'. Whether children have or have not these qualities largely depends upon the methods used in

teaching them. I have visited and carefully studied schools in London, Liverpool, Birmingham, Bradford, Leeds, Halifax, Leicester, Manchester and other places, and I must say that I am deeply impressed with the necessity for improving the methods of teaching often employed in this district, especially with a view to developing more self reliance and greater powers of effort in the pupils. This can only be done by training and inspiring the teachers. The second question is:- Can it be done? Can Sunderland afford a Training College ? Setting aside for a moment the broader outlook which urges upon us the conviction that, granted the facts stated above, money spent on training teachers is the most economical investment the nation can make, we may note the following points:- The grant given by the Board of Education covers three quarters of the capital expenditure, and all the current or annual expenditure. The grants paid to the students for attending the College amount to over £2,000 a year. The great bulk of this is spent in the town. The expense of maintaining the College, including the salaries of the staff, amounts to about £3,000 a year, and is defrayed by the Board of Education - but the money is spent in the town. The construction of a permanent building would employ large numbers of workmen, again benefiting the trade of the town. Surely if the

Government offered to open a new shipyard here in Sunderland people would rejoice ? Why do they fail to see that this is a similar case ? Except that the ships built would leave Sunderland, whereas the fruits of the work of a Training College would remain in the town, to a very great extent. Instead of costing money, a Training College, owing to the present liberality of the Board of Education, is actually a source of income to the town.

Lastly; 'Are trained teachers in demand ?' There is evidence to show that in another year or two there will be a great shortage of trained teachers. At present the supply is greater than the demand in the autumn, when all the Colleges have just poured out their annual stream, but this is righted in the spring. The better students have little or no difficulty in finding openings for their work, in many cases being appointed to a definite school before leaving College. Of what other profession or trade can the like be said ?

Thanking you in advance for your consideration.

Yours etc.

Margt. M. Cussans.

The Rate Payers Association was not content with merely writing letters, the strong opposition and adverse feeling engendered by the proposal to build a College was to be

focussed at the meeting to be held in the Victoria Hall on the 5th.October,1910. The prevalence of antagonism to their plans was so great that a special meeting of the Day Training College Governors was held on the 4th.October (3) and the Chairman, Dr.R.G.Bell, Councillor Bell and Mr. James Burnicle were selected to attend the meeting and state their case. Reports of this meeting tell of a hall packed with an enthusiastic, interested audience cheering the statements of Councillor Lawson, leader of the opposition, and rather hostile to Dr. Gordon Bell.

Dr. Bell spoke of the pressure being applied by the Board of Education to rebuild or close the present College. He tried to reassure the ratepayers that of the estimated cost of £21,975 none of this would be required from the rates, because the Board would provide 75% of the cost and the income from the College, including students' fees and Government grants, would be quite sufficient both to cover that amount and pay the whole cost of maintenance and administration. The same would apply to the Hostel which was to be built in connection with the College. The sum which the Council would be required to borrow would not cost more than £129 per annum in interest and sinking fund, and that the revenue of the hostel would be quite sufficient to meet that and in addition

cover maintenance charges. Worried rate payers would be comforted by the knowledge that the College would be self-supporting, indeed it would mean about £8,000 being spent in Sunderland that would not otherwise be spent. The opponents concentrated their antagonism to the plan on the statement that the College would be no charge on the rates, saying this was too good to be true. The ultimate bill would be much in excess of the estimates and that already there were too many teachers from existing training establishments. By an overwhelming majority, the meeting favoured the rejection of all proposals for a Day Training College.The effect of this expression of public feeling upon the Council was illustrated in two editorials of the Echo. The first, dated 10th October stated :- " It will be interesting to see what action the Town Council may take on Wednesday in respect of the Day Training College scheme. The rescission of the motion in favour of this proposal which was adopted in the last meeting will, I understand, be moved, and in that case, the decisive condemnation of the scheme by the great meeting in the Victoria Hall will come into play as a big gun. The result remains to be seen. There is, of course, a great deal more to be said on the subject than has thus far been stated, and the Council may decide to refrain from bending itself in any way till further

and clearer information upon the issue is obtained. A section of the opponents of the scheme talk, I regret to note, as though they were opposed to any development of education - a policy that the advance of other nations condemns as narrow and dangerous." The second, dated 13th. October,1910 was as follows:- " The Town Council yesterday by 27 votes to 26, two remaining neutral, rescinded the resolution adopted at the previous meeting in respect of the Day Training College scheme. This was in accordance with the expectation of many, influenced largely by the recent meeting in the Victoria Hall. Whatever else may be said of the matter there can, we think, be no doubt that the meeting represented pretty general public feeling, whether this feeling springs from knowledge or not. For the present then, the scheme is in the background for the permission to negotiate for a loan is withdrawn. The question, however, must come up again, for if a new Training College is not to be provided, the present College must go. This is a matter that calls for graver consideration than has yet been given to it, though in the present state of public temper, a more favourable view of the question is unlikely. At the root of the matter is a protest against the tendency to ever increasing charges on the rates, and in the case of the proposed new College

there are two widely held opinions. One is that after the Town had irrevocably committed itself to the scheme, the Board of Education would probably make charges that might involve additions to local charges, and the other is that the supply of teachers is already excessive and is likely to become more so, even under existing training resources. An so the matter stands."

The opposition to the plans for building a Day Training College now moved into the political arena when Dr. Bell's position on the Council was threatened by the Rate Payers' Association. The intense interest in this matter was further illustrated when a crowded audience turned up at St. Barnabas' Institute, Hendon, on a Saturday evening, for a meeting of the burgesses of the Bishopwearmouth Ward, convened under the Municipal Corporation Act, to hear addresses by Dr.R.Gordon Bell and Mr.T.Crawford, as candidates for the representation of the Ward on the Council. How different from today, when even larger sums of money are spent by Councillors, elected by an apathetic electorate. The importance of wealth then, can be seen in the proposal of Dr.Gordon Bell, by Councillor Blumer, as reported in the Echo, November, 1910:- "Councillor Blumer proposed Dr.R.Gordon Bell as a fit and proper person for re-election as representative of the Ward. He said he did

so as a voter in the Ward ;-as one of the largest rate payers in the Ward. He had worked beside Dr.Gordon Bell for the last two years on the Higher Education Committee, and he considered him to be the right man in the right place. He spoke of the economical supervision the Doctor had exercised over the expenditure of the Committee....." This report then quotes Dr.Bell's address and from this it is clear that he was a very capable and enlightened man for his day, or in fact for any period. He is quoted as saying:- " The conception of education today was that when a boy or girl, or young person went out into the world they should be equipped for their life's work, not only with knowledge, but with properly developed mental powers, so that they could face the new problems before them. These would only be solved by the application of knowledge and applied science to commercial methods, and by the general development of the intellect. He had been subjected to so much abuse and misrepresentation that he wanted an opportunity to state his case fairly. As an example of the misstatements that were being made; there was something in the address of his opponent to the effect that £120,000 was spent on education out of the rates, where as, on the contrary, the actual cost on higher and elementary education was £41,000. A charge of extravagance had been

made in regard to higher education. In reply to this allegation he wished to say that they had developed higher education to such a pitch that they had now a School of Art, a Technical College, a Training College, Bede School, 1,100 night students - they had developed all that forty times more than it used to be and they had not increased the rates a penny....." The hopes of linking Sunderland Technical College and the University are also referred to:- "He alluded to the unseen work that had been involved in the remodelling of the University of Durham and in seeing that the Sunderland Technical College had at least an open road to it.....Alluding to the Training College he stated that three quarters of the capital expenditure was a free gift from the Government, and the other quarter we raised by a loan, which was redeemed out of the fees of the students. The Training College, in the two years that it had been in existence, had each year brought in or kept in the town of Sunderland, £6,000. In fact, there had been spent in Sunderland a sum of money annually greater than the whole rate for higher education. The hostel for women would be self-supporting, and would also mean the spending of money in the town. He would also be pleased if the Government would ask them to establish a hostel for men, because the grant was so big, and they could make ends meet

without the slightest difficulty. He did not believe in the construction of merely a ladder from the elementary school to the University, but a broad highway along which every man's son could travel." The type of opposition to Dr.Bell and the Training College scheme is well illustrated by a speech by Councillor Laidler in moving Mr. Crawford as a fit and proper person to represent the Ward instead of Dr. Bell. He is quoted as saying:- " The Authority had got itself into a muddle over the Education question and the only people who could get them out of it were the ratepayers. He supported Mr.Crawford because he had known him for many years to be a steady and industrious man, and because he knew that as a ratepayers' representative, he would put his foot upon any excessive expenditure, whether it be educational or otherwise. The cost of education had grown enormously in the town and would be a great deal more as time went on. Boys and girls from the age of five - poor tiny little things were kept at school until they were fourteen, and a whole lot of rubbish was shoved into their heads and dragged out again by a system of examinations - so that when the children got back into their parents' hands they found their upper storey's fractured. He referred to the economical administration of education by the old School Board and said it seemed to him that everything

the Council took in hand, no matter what it was, turned out a dead failure and a dead loss to the ratepayers. He thought an efficient education in reading, writing and arithmetic was sufficient cost to the ratepayers, and boys and girls should be able to supplement that education by attendance at the night schools."

In the ensuing election, fought chiefly over this question of whether to build a new Day Training College or not, Dr.G.Bell was defeated, by the Rate Payers' Association's nomination, Mr.T.Crawford, a retired butcher, who had a substantial majority. One of the most outspoken critics of the scheme, both as an official of the Rate Payers' Association and as a political opponent of Dr.G.Bell, was Councillor G.S. Lawson, a solicitor and like Dr.Bell, a representative of the Bishopwearmouth Ward. Having taken a great interest in educational matters, Councillor Lawson and his friends now thought that he was entitled to represent the Bishopwearmouth Ward on the Education Committee, occupying the seat left vacant by the defeat of Dr.Bell. Accordingly, he was duly proposed in November for that Committee, but a member of the late Education Committee, one of Dr.Bell's friends, proposed Mr. Crawford of the Bishopwearmouth Ward, instead of Mr. Lawson. Mr. Crawford refused nomination and seconded the

proposal for Mr.Lawson. At this point the new Mayor, Mr. Sanderson ruled that Mr.Crawford could not refuse to be nominated and in the ensuing vote, Mr.Crawford was elected. At once Mr.Crawford resigned and proposed Mr.Lawson for the vacant seat only to be ruled out of order by the Mayor who stated that there could be no more elections until the next annual meeting. This farce was re-enacted at subsequent meetings and the press of the area and even the national press, commented on this Gilbertian situation. Athough much of the situation seems slightly ridiculous today, at the time feelings ran high as the next two extracts indicate:- The Echo, 12th. January,1911 - "The Town Council had a lovely time yesterday, one of the incidents being the election yet again of Councillor Crawford to the position on the Education Committee that he, from the first, did not desire. We may assume that this gentleman will again resign; but will he again be elected to the position which he refuses to occupy? The motion that he should fill the vacancy which he has repeatedly created was carried yesterday only by 26 to 23, and at the next time of asking the majority may, to his joy, be against Mr.Crawford. A great deal of bad temper has latterly been witnessed in the Town Council, and yesterday we had the Town Clerk threatening to resign because of what he conceived to be

unjust treatment of him by some members. We take no side in the quarrel about the minutes which led to the protest of Mr. Bowey, but surely a little general " sweet reasonableness" would prevent such undignified bickering upon a point of procedure, as was witnessed yesterday. Had friendly feeling prevailed, the result of the discussion under notice could have been attained in a few quiet words." Quiet words and friendly feelings, however, did not prevail and this wrangle continued until finally it reached Mr.Justice Ridley and Mr. Justice Channell, sitting as a Divisional Court on the King's Bench Division in London. The whole problem of the Training College proposals, the Victoria Meeting, Dr.Bell's defeat and the conflict between the Mayor, Mr.Crawford, Mr.Lawson and the Town Clerk received national prominence. On the 7th.April, judgement was given in favour of Mr.Crawford, the Judges stating that he had a perfect right to resign and they ruled that the Corporation had to pay costs.

Ensuing events must have been most frustrating for the opponents to the schemefor they seemed to win every battle but kept on losing the war. The Governors, having received yet another communication from the Board (4) stating that no new students would be admitted in the Autumn of 1912 unless suitable premises were provided, brought the

matter to the Council again as reported in the Echo on November 25th.1911;- " The greater part of the Education Committee's meeting was devoted to the consideration of the Day Training College question and the result was the adoption of a resolution to recommend the Council to authorise the Committee to negotiate for a site. This means that the matter is to be raised again in regular form, thus restating the whole controversy that was regarded by many as ended by the Victoria Hall meeting, the adverse vote in the Council, and the defeat of Dr.Bell. What grounds the Education Committee may have for thinking that the scheme can still be carried through we know not, but we may be sure that the action of the Committee will, when the elections are over, give us a revival of protest which, whether right or wrong,, show that public feeling was dead against the project. The Committee may be convinced that reaction has set in. If so, we shall see whether they are mistaking fancies for fact."

Although from a reading of the Minutes of the Higher Education Sub-Committee, the Governors seemed rather frugal and parsimonious by present day standards, one cannot but admire their perseverance in the face of strong political pressure in pushing on with their plans for Higher Education in Sunderland. They were influenced, not by their fancies,

as reported above but by hard facts. The Board refused to recognise the present premises after 1912, a hostel for women students must be acquired and obligation to staff and students honoured. Perhaps even the Medical Report from Dr. Bell, as to the advantage to the health of the students if they were properly fed in hostels, had some influence.(5)

The financial statement to the Council proved the feasibility of the project at no great burden to the ratepayers, and follows since it provides an interesting comparison with present day costs.:-

Financial Estimate Day Training College	
Capital Account	£
Purchase of Land	7,800
Estimated cost of preparing Playing Field	675
Estimated cost of erecting Buildings	13,500
	21,975
Deduct- Allowance by Board of Education	16,481
Total amount of Loan required	5,494

Annual Interest and Sinking Fund on this amount £ 248

Maintenance Account

Income.

Maintenance Account.

Income.

		£	£	£
Board of Education Grants	150 x 13			1,950
" " " " (Men)	75 x 25	= 1,875		
Less Transferable to Students	75 x 15	= 1,125		
				750
Board of Education Grants(Women)	54 x 20	= 1,080		
Less Transferable to Students	54 x 10	= 540		
				540
Fees from Hostel Students	21 x 10	=		210
				£ 3,450

Expenditure.	£
Salaries	2,598
Books, Apparatus	220
Rates, Heating, Lighting & Cleaning	230
Interest & Sinking Fund	248
Cost of Administration Repairs	154
	£ 3,450

The site now under consideration was that on the Ford estate, near the Hylton Road, where they hoped to buy 12 acres costing about £650 per acre. Here it was hoped to build a

larger College, with not only a hostel for women but perhaps later a mens' hostel also. Advocates of the scheme based their hopes on the example set by the city of Leeds which had built a large training college costing £240,000 and had not put up the rates in that town. Plans were provided by the Works Sub-Committee, and after haggling over the suitability of a stone wall compared with a cheaper wooden fence around the site, were forwarded to all the appropriate authorities. (6) Finally on August 9th.1912, a special meeting of the Education Committee, on the advice of the Joint Works and Higher Education Sub-Committee, decided to recommend that the Council proceed with the provision of a new Training College on the larger scale as desired by the Board of Education. (7) The voting for this proposal, moved by Alderman Bruce was not unanimous, being carried by 23 votes to 19. This decision again provoked political activity. The chief opponent now was a prominent professional man called Mr.French, who backed by the Rate Payers' Association, stood for the Council in the local elections, in the Hendon Ward. Two days before the close of nominations, provoked by election propaganda, denigrating his activities, Dr.Gordon Bell returned to the political arena and opposed Mr.French. Two days of bitter election fighting followed, causing intense interest in the

town. A large crowd gathered in Fawcett Street, jostling, surging, cheering and counter cheering until 2.00a.m. as the results were announced. Chief interest lay in the Hendon Ward where the results had to be counted twice, Dr.Gordon Bell winning by a majority of 14.(8)

Once again however, the courts had to hear of the struggle to build a college in Sunderland, this time due to a libel action brought by Councillor George S.Lawson against Mr.G.T.Ferguson, Headmaster of the Bede Collegiate School and heard at York Assizes, before Mr.Commissioner Foote and a special jury. At an Education Committee meeting, attended by the Press, Councillor Lawson had accused the Masters of the Bede School, of attempting to influence the voters in the Hendon Ward in favour of Dr.Gordon Bell, by co-ercing the boys and using them to send political messages to their parents. Mr.Ferguson, the Headmaster, angrily and rashly committed himself to a reply in the local paper, which resulted in the libel action in which he had to pay damages of £50 to Mr.Lawson(9) This seems to have been the last great public opposition by the Rate Payers' Association, because in November, Mr. Lawson retired from its ranks and since nothing was spent on building the new college before the

outbreak of the War in August, 1914, very little was heard of the scheme in the Press.

This, therefore, seems a convenient point at which to end the account of the earlier political controversy aroused by the proposals to build a Day Training College in Sunderland.

CHAPTER 6

TEACHER TRAINING IN SUNDERLAND(2) 1908-1969

The Education Act of 1902 imposed on Local Authorities the duty of providing Higher Education within their districts, and the committee appointed by the Local Authority commenced in the autumn of 1903 an enquiry in to the needs of Sunderland. Evidence was heard from 13 persons and considerable detailed information was obtained from various sources, after which the committee carefully considered the whole subject and reported in July, 1904 that "Application ought to be made to the Board of Education to recognise a Day Training Department at the Technical College". This was approved by the Council on 10th. August, 1904. Negotiations were entered into with the Board of Education and on 28th. January, 1905 a deputation was sent to the Board to urge recognition of a Training College Department. On 27th. March, 1905, the Board wrote, setting out the conditions under which the College could be recognised. Nevertheless, the Council persevered with its original intention and on 11th. October, 1905, resolved, on the report of the committee:-

"That the application of this Authority for recognition of the Municipal College as an Institution witha Department for the Training of Teachers be persevered with."(1)

In May, 1906, another deputation was appointed to wait

on the Board, and on 29th. June, 1906, the clerk to the committee wrote to the Board agreeing to the Board's views and again asking sanction to establish the College. Further correspondence and interviews with representatives of the Board ensued, in the course of which plans for the necessary buildings were submitted. The reply by the Board on 15th. March, 1907 was as follows:- The Board is now prepared to approve this proposal provided that an assurance can be given that the following conditions will be carried out:-

1. The staff organisation and accommodation of the Training College and the Technical College must be quite distinct.

2. If it is proposed to accommodate the Training College in the same block of buildings as the Technical College, all the rooms in the present building, with the exception of the cloakrooms, offices and physical and chemical laboratories, must be preserved exclusively for the use of the staff and students of the Technical College. Plans for the additional rooms necessary for the accommodation of a Training College should be submitted to the Board at an early date.

3. A fully qualified Principal must be appointed for the Technical College without further delay at

a salary of not less than £500 per annum and the chemical and physical laboratories of the Technical College must be placed under his control.

4. A Principal possessing such literary and academic qualifications as the Board can regard as satisfactory must be appointed to the Training College, at a salary of not less than £500 per annum. The Principal of the Training College must be in no way subject to the control of the Principal of the Technical College.

5. The list of staff of the proposed Training College appears to be satisfactory provided that:-

   a. at least one half of the lecturers are women.

   b. when the Training College reaches its full numbers in its second year an additional Mistress of Method must be appointed.

   c. a list showing the names, academic qualifications and salaries of the proposed staff is submitted to the Board for their approval.

6. In addition to the practising schools, a school or schools must be placed at the disposal of the Training College for demonstration purposes. The staff of this school must be selected with the co-operation of the College Authorities and the curriculum determined by

by the College Authorities.

7. The Authority must be prepared to provide a Hostel for the accommodation of the women students not resident in Sunderland.

It further appears to the Board to be advisable that a Sub-Committee or other body should be appointed by the Authority to act as Governors to the Training College and that this body should be definitely charged with the supervision of the conduct and studies of the students of the College.

I am also to request that a statement may be forwarded showing what provision will be made for playing fields for the Training College(2).

To facilitate progress on the 10th. December, 1907 a Day Training College Sub-Committee was formed(3) to which Councillor Bell reported verbally, as to the suitability of the premises known as Westfield House for a College. On 20th. December(4) plans were submitted for renting Westfield House at an annual rent of £80, after alterations costing £191 had been made. Nothing could be done without the Board's permission and on the 23rd. January, 1908 (5) the Chief Inspector for the training of teachers, inspected Westfield House and criticised the provision of lighting, heating, toilet facilities, common room accommodation and also the facilities to be utilised in the Technical College.

These alterations and improvements were made and at its last meeting held on 20th. February, 1908 (6) the Day Training College Sub-Committee proposed to advertise for a Principal, at a salary of £500 per annum; who should be a graduate of a British University, capable of acting as Master of Method, Lecturer in Education and prepared to take an active part in the teaching work of the College, in these and other subjects as required.

When next they met under the Chairmanship of Dr. Gordon Bell it was as the Governors of the Day Training College and they heard of the Board's approval to their plans. The new Board of Governors after several meetings, from a list of 45 applicants, (one from Colombo, Ceylon and another from Cairo, Egypt) finally appointed on the 18th. June, Mr. George Readdie, M.A., (Edin.), Head of the Commerce Department of the Technical College, to be the first Principal of the Sunderland Day Training College(7).

He was able to go ahead with organisation, since on the 25th. May, the Board of Education had approved the accommodation provided in Westfield House, together with the use of one room in the Technical Institute for not more than 140 Day Students(8). This approval was only temporary because the Board was of the opinion that a permanent building should be provided as soon as possible. One of the first things done was to submit the

College Rules to the Governors on the 6th. July, 1908. These are especially interesting when one considers the conditions under which students live and work at present. They were:-

1. Students are required to attend punctually and regularly at the Lectures and Classes for which their names are entered.

2. All students must conduct themselves with propriety and decorum, both in College and elsewhere and refrain from everything which would bring discredit on their College or profession.

3. Smoking in any part of the building or its precincts is prohibited, or on any occasion when academic dress is worn.

4. Students committing any damage to the College buildings or College property will be required to pay for making good the same and may be excluded from College till payment is made.

5. Students are required to wear academic dress when attending lectures, examinations, or public meetings of the College, or on such occasions as may be required by the Principal.

6. In cases of absence a written notice should be sent to the Principal at once.

7. Any student may be suspended by the Principal for a breach of the Rules and this suspension reported to the Board of Education with a view to the expulsion of the offender.

8. These rules may be added to or altered by the Governors.

9. All students must sign a declaration of intent to conform to the Rules of the College.

The Governors approved of these, except they wished first to consider the case of any student suspended and then they would decide if a report should be sent to the Board. Also they decided to give preference to suitably qualified applicants wishing to be admitted to the College, who had been either Pupil Teachers in the Borough, had attended local schools, who resided or whose parents resided within the County Borough.

Being a Governor in 1908 was a time consuming affair. Meetings were frequent and they were meticulous in their duties. They definitely governed, chose staff and students for the College, and discussed in great detail the choosing of equipment, furniture and even the repairing of broken window cords(9).

Finally the Sunderland Day Training College was opened at 10.00 a.m. on the 22nd. September, 1908 with a capacity to train 140 students. In its first year there were 27 men and43 women students, who paid £10 each year tuition fee

and 10s.0d. to the College Games Fund and College Societies. They assembled daily before 9.00 a.m. in the Examination Hall of the Technical College, to partake in a simple service, consisting of a prayer and hymn, before attending lectures, suitably attired in cap and gown.

In addition to the Professional Subjects viz. Education, Hygiene, Physical Training; instruction was given in English, History, Geography, Nature Study, Music and Art. Students were expected to receive a wide education since it was the policy stated by Robert L. Morant "The principle to be remembered is that the student on leaving college must be so equipped, and must have been intellectually trained in such a manner, that at short notice he may be able to acquire an adequate knowledge of any subject which he may have to treat in the course of his career, and with which he happens to be somewhat unfamiliar."

From the bare facts stated in the minute books the first two years could not have been very happy or secure for the Principal or the Staff. They would be only too aware of the temporary nature of their premises, that the Board refused to allow them to be used longer than a year or two and that the general public, particularly the Ratepayers Association, refused to sanction the spending of money on new buildings. Also they had little or no academic freedom whatsoever and

were under the direct control of the Governors and watchful criticism of the Board's Inspectors. A list of the staff, their duties and salaries with which the College began its work in 1908 is as follows :-

Mr. G. Readdie M.A.	Principal, English Modern Languages, Education	£500
Miss Taylor	History, English Mistress of Method	£160
Miss E. Beadows	Mathematics and Needlework	£130
Mr. Hood	Geography, Nature Study	£200
Mrs. Laycock	Music	£30
Mr. Rogers	Art	£25
	Physical Training	£20
Mr. Simpson	Manual Training	£20
Sgt. Major Leibrecht	Swedish Drill	

Later (because of the addition of a further 32 men and 38 women students in 1909) Mr. Brierly (Mathematics), Mr. Jones (Master of Method), Dr. Bettha Webb (Hygiene) and Miss Cussans (Mistress of Method) were appointed.

The strict control the Board and the great power exercised by its Inspectors over Training Colleges can be seen by the tremendous influence and part they played in the early days of the Sunderland Day Training College. The Board was very

zealous as to the quality of the Staff employed. A copy of Circular 1015 which although dated October 1917 summarises the powers which the Board used to the full from 1908 onwards states:

Circular 1015

I am directed by Mr. Fisher to refer to Article 5(d) of the Regulations for the Training of Teachers for Elementary Schools, which provides that:-

"All proposals for appointments to the teaching staff of a college including the post of Principal must be submitted for approval to the Board, together with the fullest possible details as to qualifications before they are confirmed by the Governing Body."

1. Some inconvenience has recently arisen in cases where a candidate who has been selected for an important post in a Training College has been informed of the fact of his or her selection before the Board has been consulted; and the selected candidate has thereupon made arrangements for taking up the post, and in some cases has resigned a post previously held without waiting for the Board's approval.

2. The Board have no desire to interfere with the discretion of a Governing Body in making a provisional selection of a candidate for a post in a Training College; but on the other hand they consider it very desirable that no announcement or statement should be made to the selected

candidate which would prejudice the discretion of the Board in considering whether they will approve of the proposed appointment or which would make it difficult for the Board to withold approval if they think fit. It is obviously desirable that the Board be in a position to announce their decision some time before the candidate is to take up duty.

The Board regard their function of approving appointment as one which imposes on them a real responsibility. The importance in the interest of the public system of education, of staffing the Training College in the best possible manner cannot be overestimated.

It must not be assumed that the Board's approval of a proposed appointment will be given as a matter of course or without consideration or further enquiry, especially in the case of the more important posts, such as those of Principal, Vice-Principal or Warden of a Hostel. The Board reserve to themselves, in exceptional cases, the right to interview a selected candidate before approving the appointment; and it may at times be necessary for them to give their approval provisionally for a probationary period not exceeding, say, two years.

Notification of any proposed appointment should be sent at the earliest date to H.M. Inspector who will at once report to the Board.

I am to add that the Board's approval will hold good only so long as the teacher is performing substantially the same duties as those to which she or he was first appointed. In the event of promotion to a higher post, or of any substantial change in the teacher's duties, fresh approval must be asked.

J.A. Selby-Bigge.

The Board from the beginning only gave faint approval to the appointment of the Principal, considering his qualifications and previous experience inadequate for the post. They confirmed the appointment of the ladies of the Staff but would not confirm those of the men until any doubts (as shown by their letter of 28th July, 1909) that more than half of the staff must be women. Later they showed their power mentioned in the circular by refusing to confirm the appointment of Mr. Brierly, who in spite of the good will of the Governors and financial and legal assistance from the N.U.T., was dismissed because they considered him unsuitable. (10) The Board also enforced its authority over matters which seem trivial today, such as on the 22nd June, 1909 the Governors were requested to change their minds and buy a sewing machine (11) the Governors had decided to save money and not buy a sewing

machine since its purchase would be harmful to the skills to be acquired by sewing by hand. On the 12th November, 1909 the Governors were invited to make the Mens' Common Room more attractive, to buy pictures, since they had not equipped fully the library to buy some second hand books and since the Naval Architecture Room of the Technical College was being used without the Board's previous knowledge this had to cease.

Another struggle lost by the Governors was over the position of Vice-Principal. At first the Governors did not consider such a position necessary, relying on the services of Miss Taylor. The Board pointed out that she could not lecture in History, English, be Mistress of Method organise school practice and look after the welfare of over 70 girls. The Governors then decided in August 1909 (12) to appoint Miss Cussans, Lady Superintendent to be coterminous with Mistress of Method and since she had agreed to do this, there was no need for extra payments to her. This was overuled (in spite of a deputation) in letter 09/4948R 22nd September when the Board insisted that Miss Cussans be called Vice-Principal and must not only receive extra payment for her position, but receive more than any other man on the staff. A catalogue of her duties given below was also requested and approved on the

16th March, 1910.

1. To be responsible for the general tone and discipline of the women students (subject to the final responsibility of the Principal)
As illustrations of what is meant, the following particular duties may be mentioned:-

a. Supervision of the women students in all matters concerning their health, behaviour, manners, dress and relations with men.

b. Arrangements for College Social Functions wherein women participate.

c. Enquiry into absence from class of women students.

d. Granting special leave for brief periods to women students.

e. Excusing women students from drill for special periods.

f. Supervision of womens' cloakrooms and common rooms.

g. Supervision of womens' private studies.

h. Supervision of womens' midday dining arrangements.

i. Supervision of womens' lodgings and regulations issued to landladies of approved lodgings.

2. Subject to the Principal, to be responsible for the general organisation and working of the College where

men and women are jointly concerned and to share in the framing, issuing and executing of all rules and regulations for the conduct of the College.

To attend all meetings of the Governors when questions directly affecting women students or staff are dealt with.

To be responsible with the Principal for the selection of women students recommended for admission.

To be responsible for the instruction and training of the women students in the Theory and Practice of Teaching, and jointly with the Master of Method for the planning, arrangement and execution of their technical exercises; such as Criticism lessons, Demonstration lesson and School Practice - her responsibility in these matters being unqualified except by the express instruction of the Principal.

To lecture on some suitable subject to the men and women.

To claim such assistance from other women members of the staff in carrying out her duties as may be necessary for their effective discharge.

Much of the power of the Board was exercised by Government Inspectors some of whose duties are given by Robert L. Morant on page 209 of "The Training of Teachers." "The Inspectors of the Board will no longer examine Training College students individually in Reading, Recitation,

Teaching, Singing, Black Board Drawing etc. as hitherto, and much time which in the past was devoted to the individual examinations in these subjects will be available for investigating the general work of the College. The Inspector will consider the suitability of the courses of instruction taken in College and the efficiency of the teaching, and will, when necessary, report to the Board thereon. In considering the latter point, he will not neglect to hear lectures or lessons given by members of the College staff, but in general the characters of the students' work will afford the best guide to the efficiency of the teaching. The Inspector will consider the course of reading prescribed for the students and the nature of the exercises set to them; he will ascertain the circumstances under which these exercises are worked, and how the mistakes are corrected. The information gained in this way may be supplemented by the students' oral answers to his questions on the subjects of their study, by an inspection of the students' note-books, and by a review of the papers worked in any examinations conducted by the College Staff. The Inspector will further report upon the choice of subjects which are studied for marks of distinction. How far a particular student may or may not

be safely allowed to omit a particular subject can only be decided by the Board after consultation on the spot between the Inspector, the Principal, and ~~the~~ a Tutor of the College. The importance and concern of the Practical Instruction in teaching to the Inspector can be seen from the same source. "During the Training College Course it is essential that the student should have ample practice in conducting classes under skilled supervision, and that he should take part in the discussion on the merits and defects of the lessons given by himself or by fellow students. These criticism lessons should be made the occasion for the freest expression of the students' thoughts on the methods of teaching, and should not be mere exercises to test whether the student has fully appreciated, or has developed the power to carry out formal directions given by the Teaching Method. The student must also have opportunities of observing thoroughly efficient schools of various types, and should make notes of his observations for submission. Care should be taken that the visits provide for observation of good teaching in every subject with which the student may have to deal as a teacher in an ordinary Public Elementary School and it will be of great advantage to the student who proposes to give a prepared lesson for criticism that he should, as a preparation, see two or three good lessons

given in the subject to children of a like age with those to whom his own lesson is to be given. The importance of correlating the theoretical instruction in teaching, the Practising School Work, and the visits to Model Schools should always be borne in mind. The Inspector will satisfy himself that both a Practising School and Model Schools are available for the students of a Training College."

The results of the exercise of these powers by H.M.I. Pole and H.M.I. Foster were far reaching. They criticised the use of Barnes School as a Demonstration School (13) because such a school must be staffed by specially competent teachers, chosen by the authorities of the Training College who must also have an effective voice in its management. Of greater import was their criticism of the College and especially the Principal. This criticism is not included here but it was sufficient for Principal George Readdie on the 11th May, 1910 to tender his resignation stating that during his long and varied career he had never yet had a critical report. The Governors accepted this resignation, relieved him from his duties giving him six months salary (14)

During their early years Governors were extremely busy. They chose not only the staff but interviewed student

applicants, chose furniture, carpets, pictures, censored the students' magazine and on the 16th November, 1909 could not come to a decision as to whether men students should be allowed to smoke in the Mens' Common Room or in the garden. They decided on the 19th January, 1910 that students who could not go home for a midday meal must attend the Co-operative Restaurant in Green Street, where one of the staff would partake of the meal and supervise it.

The intense interest taken in the affairs of the College by the Governors, is well illustrated in the Minutes of the Meeting held on the 1st December, 1909. At this Meeting Councillor R. Bell reported that he had attended a music lecture from 5.00 p.m. to 6.00 p.m. at this lecture five students came late and twenty students, of whom only three could be accounted for were absent. This was regarded as most serious, since if an Inspector had been present, the grant earning power of the College would have been in jeopardy. Hence it was decided that the Principal and Vice-Principal should deal with the offenders, who must each given an account of their absence in writing to the Principal, to be forwarded to the next Governors' meeting also the Principal must report on the following :-

1. Absence of students from lectures.
2. Steps taken to prevent such occurrence.
3. Methods of checking attendance.
4. Explanation of the circumstances of a smoking concert held at the Palatine Hotel by men students.
5. The work done by the students during the session 1908-1909.

The Minutes of the 16th March reveal another interesting facet of the concern taken in the College by Dr. Gordon Bell, who was not only Chairman of the Governors but acted as Medical Advisor on the health of the students. He had examined the students on entering the College in 1908 and before leaving in 1910 and came to the conclusion that the regular life, lectures on hygiene, participation in drill had made the students healthier. According to his measurements the women had grown little but the men were slightly taller and their chest expansion greater. Much sickness had been reported during the winter term due, Dr. Bell suggested, to the very severe winter and the very poor breakfasts taken by the students before attending College. He thought that the cure for this was to have hostels for both men and women students.

When Mr. Readdie resigned on the 19th May, 1910, Mr. Jones, Master of Method, was made acting Principal and the

Vice-Principal's salary was increased from £200 to £250. It was also decided to advertise in the Times, Spectator and Athenæum for a Principal and a Warden for the forthcoming Women's Hostel in Bede Tower. The applicant for the Hostel post was to be paid an extra salary of £80, and given full board and residence, and must be a graduate of Girton or some other such College would be preferable. (15) On the 11th July, 1910 Mr. Samuel Hoole of Carmarthan was chosen to be the College's second Principal and Mr. Jones, as well as being Master of Method was appointed Senior Assistant to the Principal and his salary increased from £220 to £250 per annum (16). Mr. Hoole's appointment was approved by the Board on 21st. September and his first year seems to have been a success, the College receiving favourable reports from the Inspectors especially in Drawing and Clay Modelling. One of the first obstacles he had to contend with must have been concerned with the Vice-Principal, Miss Cussans, who appears to have been a woman of strong character and decided views who soon wrote a letter (17) of resignation stating, "Mr. Burnicle intimated to me verbally last Tuesday, that the Governors of the College wished me to resign the post of Mistress of Method and Vice-Principal of the College." At first the Governors agreed to giving her six months notice,

from the 17th January but later the Higher Education Sub-Committee after hearing a letter from Mr. Hoole, agreed to his request to give her three months notice from December. A similar attitude to his staff can also be seen later in the minute book when it is recorded on the 19th July. "The Principal reported that after one year's observation he did not see any grounds to recommend an increase of salary to anyone on the staff...." In June 1911 Miss Tucker B.A. of Hartley College, Southampton, was chosen Vice-Principal and Mistress of Method at a salary of £250. Her duties were redefined and later approved by the Board but no copy is given, so it looks as if conflict had arisen over Miss Cussans interpretation of her duties. Results at the end of Mr. Hoole's first year were, out of 72 candidates taking the examination, 62 passed, 11 with distinction and 9 took optional subjects and the Inspectors were satisfied with the year's work.

For the next two years the life of the College appears to have gone on smoothly, apart from a lack of specialist rooms, especially for P.E. (which still applies at the present time). In Volume 8 (November 1912) of the Minutes we learn that Park Hall was to be used as a dining room and £35 is allowed to buy linen, cutlery, china and kitchen utensils. Victoria Hall was hired for Physical Training, later replaced

by Bede Hall in Burdon Road, which was used twice a week for two hourly sessions at a cost of 10s. 0d. On page 12, two Governors, Mr. Johnstone and Mr. Burnicle are delegated with the task of providing accommodation for College socials and they hire the Alexander Hall. Of the more important issue of premises there is little to report. The Board continues to press for the Authority to provide permanent buildings and are disatisfied with women students still being in lodgings. But all that happens is that the Governors decide not to use Bede Hall as a Women's Hostel, to build a hostel for 40 women on the new site at Hylton Road and in Volume 9 on the 18th February agree with the Inspector's request, to also build a hostel for 40 men on this site. Along with this request the Inspector gave a favourable report of the work of the College, the work being creditable and the tone considerably improved. This is indirectly verified by the fact that Mr. Jones, Master of Method, was chosen on the 4th March to be Head of the Training College for Men of the University of Birmingham. With the outbreak of war in 1914 progress was halted and the future of the College was very much at stake. Its effect on men students can be seen from the following statistics :

Years in College	Men	Women	Total
1908-10	27	43	70
1909-11	32	38	70
1910-12	40	32	72
1911-13	36	36	72
1912-14	40	34	74
1913-15	32	39	71
1914-16	15	45	60
1915-17	5	69	74
1916-18	2	57	59
1917-19	0	77	77
1918-20	1	62	63
1919-21	34	43	77
1920-22	9	54	63
1921-23	0	85	85
1922-24	0	63	63

By January of 1915, 29 of the second year men were with the colours and vacancies existed in the College. Since vacancies existed in most Colleges, the Principal had to attend a conference, the outcome of which was reported to the Governors on the 31st July. They had to choose from the following alternatives, which was a means of concentrating Training Colleges.

i. Close Sunderland Day Training College entirely along with the Men's Departments of Hull and Sheffield

Training Colleges.

ii. To send to the City of Leeds Training College all of the men students from Hull (39 men), Sheffield (28 men) and Sunderland (24 men).

iii. To send 104 women students of Sunderland Day Training College to Hull, which had vacancies for 25 or to Sheffield where they would live in lodgings or give them the option of attending the Elementary Training Department of the University of Durham Armstrong College, as Day Students.

iv. The Board however asked before proceeding any further with these proposals if it was possible for the College to carry on during 1915-16 with the number of students expected to be in attendance, without submitting a claim for a supplementary grant from the Board and without incurring further expenditure from the rates (18)

Needless to say the Governors decided on the latter and determined to keep their College in existence as long as possible. The next blow fell on the 22nd September, 1915 when a letter from the Board stated, "that in the public interest that the whole scheme for the provision of a Training College at Sunderland with the aid of a 75% building grant should be abandoned for the present." (19)

Today when the College exists in several scattered buildings, some parts being over a mile from the administrative

block, it seems a tragedy that greater effort was not made in the period from having the plans approved in 1912, until the outbreak of war, not to have utilised some of the 12 acres (more was available) of the Hylton Road site, even if a wooden fence had been used instead of a stone wall to surround it. This letter also emphasized the unsuitability of the College premises, stating that they could only be used during the war. After the war the whole question of Building Grants would be reviewed, the College would only be allowed to admit students if approved premises were obtained and no women students would be admitted without hostel accommodation.

During the war all of the nation's colleges naturally existed under difficult conditions and the training of men virtually ceased to exist. The following statistics for Sunderland's men students illustrate this:-

1912..40, 1913..32, 1914..15, 1915..5, 1916..2,
(medically unfit) 1917..0, 1918..1.

When the war began, teachers were considered to help the country best by remaining at their posts, then they were encouraged to volunteer, the age of admittance to College was lowered abolishing the pupil teaching year and then finally all training of men ceased. Parts of the appropriate circulars which illustrate this state of affairs

are enclosed in the appendix. Considering its brief existence, the College had a fine War record, 220 of its men students and two of the staff joined the Forces, 32 were killed in action, two died and five were taken prisoner. Most of the casualties occured during Whit 1915, when almost a whole year's group of students who had joined the 7th Company of the Durhams were killed. The women students helped to run children's play centres, entertained wounded soldiers and did first aid work in local hospitals. The results during the period were good and the Chairman of the Governors reported that the full inspection of the Training College by His Majesty's Inspectors had taken place and that no report in writing would be made. His Majesty's Inspectors Richards and Steele had, however, informed him that they were quite satisfied; progress in certain departments being remarkable, and that they had asked him to inform the Governors that they found everything in perfect order and nothing but what they could commend. (20) During the war years, therefore, the College remained in Westfield, had to vacate the rooms used in the Technical College and give its own science lectures. There were approximately between 100-130 women students taught by a Principal and nine staff. Their experience, salaries and some facetious replies to their Governors questionaires

can be seen in the appendix. In a reply to a Board's questionaire in 1916 concerning educational reform after the War, the Governors gave an interesting return. They did not consider that teacher training methods needed any change, no further legislature was required to enable L.E.A.s to give teachers greater academic freedom, inspire original teaching or promote educational experiments. Their only positive contribution was, that they would like to see legislation compelling the introduction of the metric system into schools and the business world as soon as possible.

With the ending of the War, the College just managed to stay open during the influenza epidemic and then everything seemed favourable for its expansion into a new building within its own grounds. Instead, it began a somewhat chequered career, staggering from crisis to crisis, its position and that of its staff being so insecure that its existence could not be guaranteed for a few months ahead. In 1919, prospects seemed very good, the Board had already given £6,000 towards the development of the Hylton Road site on the Ford Estate, now owned by the L.E.A. The Education Act of 1918 held out much hope of a bright educational future....the education of the whole child from the nursery to the University. In February, 1919, the Editor of the Echo complimented Sunderland's

Education Committee on the great strides they were going to make to get the best out of Mr. Fisher's Education Act. All of these plans meant more teachers, the best young men and women now in business and industry would have to be attracted to the teaching profession by an increase in teachers' salaries. This would also mean an increase in teacher training but this could be done locally and then followed a description of the new college and hostels to be built on the Hylton Road site.

But now the Governors decided that they should waive their right to the 12 acres of land on the Ford Estate, which could be used for housing, in exchange for a site of equal area on the Durham Road Estate which had recently been purchased by the Corporation from Mr. Pemberton. (21) On this site of 25¼ acres behind the Childrens Hospital, they would build a college, hostels for men and women, a secondary school for boys, a secondary school for girls and playing fields for football, cricket, hockey etc. By April 8th, 1920 this scheme was abandoned due to costs for the new building having increased from £30,000 to over £100,000. The Governors now recommended that Langham Tower, a fine building on the Christ Church corner, bought by the Corporation for £8,000 and now used as a residence for nurses, should be altered to make it suitable for a

Day Training College for 150 students. The alterations and extensions would cost about £11,500 hence the total cost would be £19,500. Since the Board would contribute 75% of this, the cost to the Town would be about £4,875 or an annual charge of £340. Another important modification to their original plan was that now they intended making the College for women students only. ~~If Langham Tower~~ was used for women students, this meant the building of a hostel and the acquisition of playing fields elsewhere. Opposition to making the College residential was overcome by Dr. Gordon Bell who said "If they wanted to train teachers successfully they must have a hostel. It was necessary that the other side of a teacher should be developed and moulded as well as the mind and to do this they should have proper supervision of the students." (22)

This decision to train women students only may have been due to a change of policy by the Board, as to the suitability of having mixed colleges, but it would probably be helped by the unhappy relations that must have existed between the Staff and Principal and between the Principal and the Governors. These were recorded in Vol. 14 of the Higher Education Sub-Committee Book. The Governors did not seem very happy with the Final results either, since they compiled a list of Final results from

ten colleges in England and Wales in order to get a good comparison. Vol. 13 of the minutes is missing and therefore it is impossible to discover the outcome of some of these internal troubles except that on Mr. Hoole's resignation he is replaced as Principal by Miss Ethel M. Alcock, M.A. at a salary of £600 to include full board, residence and laundry when the College ~~became residential.~~ She had attended Newnham College, gaining her M.A. degree in the Medieval and Modern Languages Tripos. After travelling abroad she had been lecturer in English, at Edge Hill Training College for four years, and had then taught in Sunderland Training College for the last eleven years. This appointment was only approved by the Board on a temporary basis for two years when it would be reviewed after further consultation with the appropriate Inspectors. (23(The Board also approved the use of Langham Tower, on condition that playing fields were provided and a hostel acquired within a very short period, but they would not give 75% grant towards the cost since theyhad already paid £6,000 towards the Hylton Road site without it being used for educational purposes. Plans were now made to convert "Ashburne" (a house within 12½ acres of ground and left to the Town to be used as a public park and for educational purposes, by the late Mr. T.W. Backhouse, a great benefactor during his life to the Technical College), into a hostel for 60 students, with dining

room accommodation for 100 staff and students. The Board approved the use of Ashburne, although finding the provision of accommodation rather lavish. (24)

Once again, everything seemed favourable when the new college was duly opened on the 6th October, 1922 by Dr. Gordon Bell, attended by local and scholastic dignatories. He spoke of past difficulties, the fine academic record, the teacher wastage and of the new academic freedom awaiting the students of whom there were 140, 70 of these living in registered lodgings. It is recorded in the minutes of 17th October, 1922 how pleased the Governors were, with the manner in which the opening ceremony had been organised by the Principal and carried out by the Staff and students. This state of affairs did not last long. Trouble had been brewing in the local press, firstly because of the plans to alter Ashburne to provide accommodation for young ladies going into a lucrative profession, especially since these were not local girls but girls from as far away as Wales, and secondly, because it was intended to rail off about 4-5 acres of the park for the exclusive use of the Hostel. This opposition was lead by the Parks' Committee who brought the matter before the Town Council, pleading that the citizens of Sunderland should not be deprived of 4 acres of the 12 acres of parkland left to them by T.W. Backhouse. The Town Council favoured the Parks' Committee and the decision to use Ashburne

as a hostel was rescinded in April, 1923. The Council appreciated that the Education Committee's scheme was worthwhile, a hostel would have been provided very cheaply and would save the ratepayers' money, but they could not deprive the citizens of the town of a third of its park.

In November, 1923 in spite of a favourable School Practice Report, the Board would only give its provisional approval for Miss Alcock to remain as temporary Principal for the academic year 1923-24. This was followed up on the 15th January, 1924 by a letter stating that the Board would not approve the use of lodgings in 1925, being tremendously dissatisfied with the state of the lodgings now provided. This was based on a report by H.M.I. Miss C.E. Carpenter in which she criticised every aspect of the lodgings used and ended her report by stating "... make it easy for them (students) to fall into bad habits and to accept deplorably low standards of cleanliness and orderliness." (25) As a result of this, the Principal had to see that all of the staff became involved and all lodgings were inspected, at least once every two weeks. A ladies sub-committee of the Governors was set up to help find, inspect and supervise lodgings.

It was now hoped to use Ashbrooke, a large house near the College as a hostel, plans were drawn up and submitted, but the reply received on 2nd July, 1924 (R821/B/2) contained a few shocks. (26)

"

1. After considering the report of their Inspectors the Board could not approve Miss Alcock's appointment after the end of the current academic year.
2. Plans for Ashbrooke contained so much structural alteration that the use of public money could not be sanctioned.
3. The Board would only permit the use of lodgings for one more year. Perhaps a hostel could be rented.
4. The Educational Block was far from being suitable. It needed a Science Room, a Library, a Gymnasium, and Assembly Hall and provision for private study."

Miss Alcock submitted her resignation and left the College in December, with the Governors' thanks for her fourteen years' service and testimonials to help her find fresh employment. She was succeeded, as temporary Principal, by Miss Bazely, the Principal of Warrington Training College, which had just been burned down, who stayed two terms. Miss A.H. Williamson, who had been with the College since October, 1917 was then appointed temporary Principal for one term only. Later, with the Boards' approval, she was appointed temporary Principal for the next full academic year.

Meanwhile plans had been submitted to use Ashbrooke as the teaching block and convert Langham into a hostel. This was turned down in a letter R/821/4/S which said "Board regret that they are unable to consider that the large expenditure of public funds proposed in connection with the purchase and adaption of

Ashbrooke Hall would be educationally justified. With reference to the Boards' letter of the 27th August, 1921, I am to point out that the offer of a special building grant which was made with Treasury sanction was expressly stated to be subject to the condition that the transaction must be completed not later than 31st March, 1922 and lapsed in view of the failure to comply with this condition. The Board would not be able in the circumstances to approach the Treasury with a view to a revival of the offer in respect of the proposal now put forward.

The Board will not raise objection to the residence in lodgings of students who are already in College or who will be admitted to the College this September, on the understanding that the arrangements for the lodgings will be properly supervised."

At a meeting with the Governors on 16th December, 1925 H.M.I. Ward gave the following gloomy information :- (27)

1. No hope of the Board revising their decision contained in the letter about Ashbrooke.
2. There was no hope that the financial situation would ease in the future and the restrictions be lifted, ~~on the availability of~~ Building grants in his opinion had gone for ever.
3. Further Deficiency Grants were to be replaced

by a Block Grant and in these circumstances the erection of buildings for Training College purposes would not go on.

4. Also, students would not be allowed to live in lodgings and he quoted the warnings sent by the Board of Education during the last few years. 'Any student admitted to the College in 1926 would not be allowed to live in lodgings.'

After this interview, the Governors chose a high-powered deputation to visit the President of the Board but hopes for the College grew even worse. The President replied in a letter R821/11/10 on the 18th January, 1926 (28) that in view of other demands on his time, he could not meet the deputation. He already had given the matter terrific consideration, he would not sanction the spending of money to make the College residential, and also under present day conditions of economy wondered if it was advisable to carry on the College. The Governors decided that since they had affected an economy of £740, of which £450 had been on Staff salaries, and in view of the large number of applicants, they would continue to keep the College for another year only. They would comply with the Boards' wishes, cease to use lodgings, and only those applicants, living in Sunderland or who could travel daily would be accepted. Councillor Priestly was not content with this and submitted the following motion

to the Town Council on 7th December, 1926, "that it is the opinion of this Council it is not desirable that the Langham Tower Training College be continued. And that all previous resolutions to the montrary be altered, varied or rescinded accordingly." This was only defeated chiefly by the work of Alderman Swann. who pointed out that the Langham Tower Training College had a high national reputation, that it would have had a hostel for £13,000 instead of now costing £38,000 if it had not been for the Town Council and moreover, it was now the policy of the Board to make authorities pay for the training of their own teachers. Since Sunderland would have to pay for 40 teachers at £40 a year, it would be cheaper to keep the College which only cost £900 to maintain. This defence of the College was now undertaken by Councillor S.M. SWAN. because its former champion, Dr. Gordon Bell had died. It is an interesting comment on the integrity of much of British politics, local and national, that the best obituary on Dr. Bell, written in the Echo of June 5th, 1926 was by his former, bitterest political opponent, ex-Councillor George Lawson. The College was however, reprieved for another year and Miss Williamson appointed temporary Principal for a further academic year (29). She was very busy together with a representative of the Governors, attending meetings at Neville's Cross College to implement some of the recommendations

of the McNair Report. As a result the Northumberland and Durham Joint Examinations Board was formed which made the following decisions. The Final Examination was now going to be conducted by a Board consisting of representatives of the University of Durham, Governors of the Training Colleges, Principals and Directors of Education. The supervision of the academic subjects, drawing up of syllabuses, setting of examination papers and recommending of external examiners was going to be done by Board of Studies in each subject. These consisted of representatives of the University and two members of the teaching staff for each subject from each College. This gave the Colleges much more academic freedom when the Board ceased to set Final Examinations after 1930.

For the Sunderland student, this meant that she usually studied five subjects.....Education, Physical Training and Hygiene, English and then a choice from History, Geography, Botany, Music, Art, Needlework and Mathematics. In the Final Examination, she could offer five subjects at ordinary level or she could study one or two, of English, History, Geography, Botany or Music to an Advanced Level. In the Principles and Practice of Teaching, the student could choose to apecialise in the teaching of either children 7-14 or for the teaching of Infants and Juniors, no course in the teaching of Senior children being offered,

The outlook for the College now improved, especially when

Inspectors Mr. Richards and Miss Carpenter suggested to the Governors that a permanent Principal should now be appointed to the Langham Tower Training College, and that a scheme for buildings, including hostel accommodation should be prepared and submitted to the Board of Education within the next 12 months on the understanding that such a scheme would be completed in five years. The sub-committee of the Higher Education Committee recommended that Miss A.H. Williamson, acting as temporary Principal should now be appointed Principal and this was approved on 16th May, 1927 (30). On being informed of this H.M.I. Miss Carpenter wrote that she hoped this appointment would mark the beginning of a happy, successful chapter in the history of the College. Later, on her recommendation, the Dining Room was extended at a cost of £70, to allow all the students to take the mid-day meal. This happier state of affairs continued and Miss Williamson was able to report on 17th October, 1927 that Miss Carpenter had spent one and half days at the College and was pleased with all she saw especially the new dining arrangements. Plans were made for a hostel at Moor Hill on the Sparks Farm estate costing £15,500. Nothing happened because on 19th March, 1928 (31) Alderman Swan reminds the Governors that the Board had given them 12 months to forward plans for a hostel and the time was up in two months. A successful deputation

was sent to get a reprieve of a year and a half and on the 17th September, 1928 plans were put forward to convert the Briery with 3½ acres of land, at a cost of £3,500. Owner Mr. Craven wanted £12,500 but the public valuer thought £6,500 a better price. This scheme must also have fallen through as the Principal, in her Year End Report, said she considered that the academic quality of the applicants was falling, since better qualified girls were applying for residential colleges. A Hostel would enable girls from a wider area to be admitted to the benefit of all. The Clearance House Scheme was now extended to Women's Colleges as well as Men's and on the 17th January, 1929 the Board announced that from henceforth, students who failed their Final Examination would be known as Uncertificated Teachers and not Temporary Teachers.

The stop go nature of teacher training is amply illustrated in the event s of the next few months. In May, 1930 a letter from the Board R 116/G4 states "In the past, doubts had been felt as to the advisability of developing the College on a permanent basis. The Board, in present circumstances and in view of the need for more and better qualified teachers would welcome a decision by the Authority to undertake a definite scheme to remedy the present deficiencies and to enable the College to maintain the standards of general efficiency the work of training teachers now requires.

In such a scheme it would be necessary not only to make provision of a hostel but also for the improvement of the Educational Block. The Authority would be aware that the Educational building would not be considered suitable unless provision was made for an adequate Assembly Hall, suitable accommodation for indoor Physical Training and further accommodation for private study. The Board feel that the provision of a hostel and improvement and extension of the Educational Block should proceed concurrently. The provision of a Hostel in itself would not place the College in a satisfactory position."

In view of this favourable prospect the Governors went ahead with their plans to convert Nos., 1,2,3 and 4 Clifton Villas, which are near to Langham Tower, into a hostel for 60 students and to make an Assembly Hall which could be used for Physical Training. So determined were they that, as 1 and 4 were available already, it was decided to use a compulsory order to obtain No. 2 and 3 if necessary. These plans were sent to the Board on 15th September, 1930, received approval on 13th October, 1930, the premises were bought and the Principal assured that the hostel would be ready for use in September, 1932. But in December, 1931, rather ironically considering the Board had been pressing Sunderland to provide a hostel since 1908, a letter was sent by them suggesting that the scheme be held over. The reason for this was the House of Lords' rejection of the Education

School Attendance Bill, the effects of financial stringency and the fear that the output of trained teachers could not be absorbed. As a consequence, the Board felt called upon to reduce the number of College places. Contraction was replacing expansion within a few months. Since the Authority had already bought the houses and started alterations, abandonment was not welcomed. A high powered deputation, including the Mayor and Sunderland's M.P.s, called upon the President and must have been successful, because the scheme was completed and the Hostel opened on 18th October, 1933 by the Chairman of the Governors, Walter B. Allan Esq., B.A., LL.B., Local students could pay £35 yearly for board and tuition, private students had to pay £115, the cost of food per student was 6s.6d. weekly and for the staff and students in the Hostel £23 16s. 0d. In June 1934 it was announced that the cost of the mid-day meal would be reduced from 1s.0d. to 9d., with the hope that all students would take advantage of this, but they had to stay for at least two mid-day meals per week.

During the session 1934-35, the College had a full inspection organised by Miss F.M. Tann, H.M.I. This received a good constructive report as regards staff and students' work. The Hostel was praised..."The Authority is to be congratulated upon the Hostel provision which has recently been added to the College. Considerable thought and care have obviously been

given to the adaptation of four houses for this purpose and the resulting building, which is dignified and effective in its simplicity, provides residence for fifty seven students, a Warden, staff, Matron and maids....A delightful atmosphere pervades all the activities of the building." The facilities of Langham Tower were criticised, especially the Science and Art rooms. (32)

Due to a decline in the birth rate, the school population in 1935 was reduced by 350,000 children and following the national policy, the College cut the intake of students by 10%. In March 1935, the College was visited by H.M.I.s, Mr. C.E. Jackson and Miss F.M. Tann who were satisfied with the work, considered that the practice whereby Geography, History and Science staff undertook method lectures in their subject should be extended to all subjects, but criticised the lack or unsatisfactory nature of the equipment. As a result the Authority gave the Library £25 to buy books, the Science Room was improved and provided with three microscopes, the Geography Room was supplied with wall maps and students taking Art could have lectures in the Art College. Between 1936 and 1939 the number of students fell but this was the end of contraction and the story is now of expansion. In January 1939, the Board approved the acquisition of Number 1 and 2 Mowbray Villas at an expenditure of £3,165 to be used as lecture rooms and an Art/Craft Department (33). At the

outbreak of War, the College was almost evacuated but was allowed to remain when adequate black-out and air raid precautions were provided. It was scheduled as an emergency hospital by the Ministry of Health but never taken over and results throughout the war were good.

With the end of the War, a new climate began heralded by the Education Act of 1944. The Institute of Education of Durham University was formed in 1947 and in October, 1948 Lord Eustace Percy became the University's representative with the Governors of the College. New buildings were acquired:- in April 1946 Park House was adapted for a hostel at a cost of £8,500 (34) and a year later Bede Tower became a well a well equipped gymnasium, with an assembly hall and facilities for drama. After its past tribulations, life must have been pleasant for the College now that it had more buildings and hostels and a student population varying between 100 and 120 girls. Due to an increase in the birth rate, 70% of the students specialised in Infant Junior teaching courses and in a special Infant teachers' course. In July 1955 Miss A.H. Williamson was the first Principal of the College to offer her resignation at a time of herown choosing and on her retirement she was succeeded by Miss J.T. Tasker, M.A. (Cantab).

It was Miss Tasker who had to organise and guide the College for the next eleven years while it grew from a small college for women, to become the largest mixed college in the Institute of Durham. In September, 1957 the College offered a year's course in Supplementary History for 12 serving teachers. On 17th July, 1958 a letter from the Ministry outlined future expansion for colleges stating there was a need for 2,500 more places. The day of the small college was over, colleges would have between 400-500 students; the Minister considered 500 the most economic unit and those Colleges near a University town or some similar educational or cultural centre would be expanded. Plans were drawn up in November, 1958 for the provision of 322 hostel places, 57 in Clifton, 25 in Park, 40 in Carlton (recently acquired) and 200 to be housed in a new hostel built on the site of Hutchinson's Buildings. By 14th September, 1959, the College extensions were to cost £143,034 8s. 0d. including £5,500 for minor adaptions to existing buildings. One wonders what "Thrift," "A Poor Ratepayer" or Councillor G. Lawson would have said to public spending of this magnitude. The Carlton Terrace hostel was renamed Westfield House in view of the fact that the College had commenced in a building of that name, and was opened in December. In this year the College returned to its former mixed status and the student population consisted of

50 men and 75 women. The next big change occured in September, 1962 when the number of students automatically rose by 50% as the new third year course began. The effect on the Establishment of this can be seen in the table below:-

Establishment	September 1961	September 1962
Principal	1	1
Vice Principal	1	1
Principal Lecturers	3	3
Senior Lecturers	10	16
Lecturers	8	13
Part time staff	2	0
Students	255	380

Thus in September, 1962,the College opened with 130 new students, eleven new lecturers, a new dining hall to accommodate 300 students and a new hostel, to hold 60 men adjoining Park Hostel. By Christmas 1962, the new teaching block to contain the Library, Geography, History, Science and English departments was completed and the Hostels were now called Halls of Residence. The next year saw further expansion, the admitting of 30 additional students and the staff now consisted of a Principal, Vice Principal, 6 Principal Lecturers, 16 Senior Lecturers and 18 Lecturers.

The Robbins' Report on Higher Education was published in October, 1963 and this proposed to transfer control of teacher training colleges from the L.E.A.s and voluntary bodies to the Universities, to introduce a four year course leading to a B.Ed. degree and to increase the size of colleges to about 750 students. The first effect of "Robbins" was on the 18th January, 1965 when the College was renamed the Sunderland College of Education.

In September, 1965 owing to the great pressure of work and ill-health, the Principal, Miss Tasker, was compelled to resign and she was succeeded, on the 26th April, 1966 by the present Principal Mr. H. Armstrong-James, B.Sc. He had been educated at St. Luke's College, Exeter; Birkbeck College, University of London and had carried out research at the University of Warwick into the Philosophy of Education. His educational experience was extensive and varied, ranging from teaching in Junior and Senior Schools to being Head, first of a Science Department, then Head of an Education Department and finally Vice-Principal of Shenstone Training College. With his appointment came the plans of the Governors to ensure that Sunderland College of Education should expand as far as possible, in step with other colleges throughout the country. This meant adapting Hudson Road Secondary School, which had become vacant, for use by the Education Department of the

College, at a cost of £10,900 with £7,500 being spent on furniture and £2,100 on equipment. At the same time St. George's House, which the Authority owned, became vacant and was adapted for the use of the Geography and Mathematics Department. Each year from 1966 to 1969 saw additional students and staff until at present there are 820 students and 80 staff which is a far cry from the beginnings in 1908 when 70 students were taught by 6 staff. 1969 also sees the implementation of the Weaver report which means that the College will have an Academic Board with jurisdiction in all purely academic matters and a Board of Governors on which the Principal, three staff and two students are members. 60 years have surely seen great changes.

Chapter 7.

Sunderland Art College.

1860-1969

On the 1st.January 1969, the Sunderland Polytechnic was formed, from the College of Art and the Sunderland Technical College, thus uniting the study of art and science after 68 years of being divided.The year 1901 saw the establishment of the Technical College in a separate building, breaking 41 years of unity in which the Art section was by far the more important in the School of Science and Art, formed in 1860. Although outside the period under discussion, it is interesting to see the early beginnings of what will soon be a Polytechnic community of approximately 2,000 students.

In 1860, a Government School of Science and Art was founded in Sunderland where it was situated in Bridge Street, Monkwearmouth Shore. It was one of many such schools set up in large towns all over the country at that time and worked to a course of study recommended by the Department of Science and Art in South Kensington, under the auspices of the Board of Education. The premises, unlike most other art schools, were not rent free and with a grant of £30 per annum from the

Corporation, the school attempted to be self-supporting. The art work which formed the bulk of studies at that time consisted mainly of painting and drawing both from still life groups, from the figure and from casts, together with a certain amount of design for metalwork, embroidery, etc. The Science section dealt with plain and solid geometry, building construction, machine construction and steam and applied mechanics. There were no full-time courses and classes were open only during the mornings and in the evenings for Art, though Science classes were restricted to evenings. The first Master in Charge, Mr.H.Lees, was appointed on a part-time basis and was succeeded in 1865 by Mr.W.Cozens-Way also on a part-time basis, with an assistant master. The first Chairman of the School Managing Committee was Mr.T.W.Backhouse, a member of a family of bankers, whose generosity was ultimately to be so effective in the later development of the College of Art.

1860 to 1883 saw several changes of location, the school moving to 21 Fawcett Street in 1877, premises which it shared with W.Briggs and Sons, Merchants, and Miss E.T.Barnes,Dressmaker. On the 18th July,1879 the school removed to Hall School, Park Terrace, later included in Toward Road, and in the same year it was known to have occupied premises in the new Museum and Library. One item of particular interest which stands out in this period

was reported in the Sunderland Daily Echo of November 7th.1879 which is quoted below:-

"Science and Art Classes. - In connection with the Science and Art classes, which will have their headquarters in the new Museum and Library, Professor Legros conducted an art class in the Hall School, Toward Road, yesterday morning. There was a very large attendance of ladies and gentlemen. The professor in the course of an hour and a half painted a picture in oils which together with another one painted by him, will be presented to the Corporation to be hung in the art room."

Professor Legros, now famous in the history of Art Education, was at that time Slade Professor of Fine Art at London University, and the painting which he carried out on that day is still on view in the Sunderland Art Gallery.

In about 1883 the school returned to Fawcett Street but to different premises at No.27, known as Atheneum Buildings which it shared with the Liberal Club and various Shipping Companies. In 1886, 21 and 42 Fawcett Street were also known to have housed the whole or part of the school until it returned once more to Atheneum Buildings.

The school attracted increasing support though so many students were in attendance that considerable overcrowding resulted at evening classes. This is borne out in an inspector's

report of 1886, ~~which~~ in which, though the standard of teaching was approved, the accommodation was stated to have " ingeniously ill-lighting for students and casts, cramped and confined space to work or move back in, broad shadows cast upon objects which thus lose all delicacy of form and outline. " It goes on to recommend that " the real remedy would be to move to premises better adapted for the purpose."

The first actual record of students is in 1888 when 117 students were known to have been in attendance of whom 75 attended evening classes only. In spite of these figures, and the income derived from fees, it was found that debts were accumulating and public appeals were made for assistance in order to keep the school in a state of solvency.

With the building of the new Town Hall in approximately 1888, application was made for use of part of the Town Hall as an Art School which, being rent free, would have greatly eased the financial difficulties. But this, for the time being, was shelved. The unsatisfactory position regarding the accommodation in Atheneum Buildings was further aggravated by the Technical Education Act of 1889 which defined Technical Instruction to "mean instruction in principles of Science and Art applicable to industries." This brought about an increased effort to cater for the requirements of local trade, and classes for craftsmen,

which had hitherto included metalwork and woodcarving, were increased to include painting and decorating, sign-writing, stonecarving and enamelling classes.

1890 saw the resignation of Mr.Way under pressure of work at his other classes in Newcastle and Mr.Woodhouse Stubbs took over the full-time appointment of Headmaster. This was the beginning of a period of prosperity for the School of Science and Art which flourished under his administration.Representations were repeatedly made for accommodation in the new Town Hall and in 1891 Councillor Roche, speaking at the Annual General Meeting of the Governing Committee stated that it was " a burning disgrace ", that Sunderland had no school premises worthy of the name. As a result of this agitation, accommodation on the top floor of the Town Hall was acquired comprising four classrooms, later sub-divided, giving an overall floor space of more than 4000 square feet. This, according to a report by the Headmaster, was far better accommodation than most other art schools in the country. A public appeal was again made for the collection of the sum of from £400 to £500 which would be required to furnish this new accommodation. Of this, the Department of Science and Art of South Kensington promised to provide £55. The school continued to flourish and in 1892 had a total of approximately 200 pupils, and was continually widening the scope of its craft instruction in

evening classes. It is worthy of note that at the Annual General Meeting in 1892, the Mayor, Mr.Stansfield Richardson, J.P. made a statement which is as true today as it was then. " Proud as I am of the British working man" he said, "and believing that, for strength and solidity, British workmanship still holds its own, and cannot be beaten in this respect, yet in taste and design we are surpassed on the Continent". He felt that the function of the Art School was to help create a sound sense of good taste, to improve the design of our manufactures, and in this he put his finger right on the fundamentals of our work which many are only just beginning to appreciate years later.

Meanwhile, the school had settled into its new accommodation in the Town Hall and had been equipped with the necessary casts to enable it to function efficiently and well. However, there were odd incidents which troubled the relatively smooth waters as the following fragment from a newspaper cutting of 1893 will show.It is headed "Nice Young Ladies - A Cruel Committee" and concerns a letter read at the Town Hall Committee on behalf of the Art School asking that young ladies patronising the Art School morning classes might use the Town Hall front entrance instead of the side where " the young ladies complained that they were brought in unpleasant contact with the dirty people frequenting the Health Department. They were also afraid of contagion from

the poor people who went to the office for disinfectants". The application was declined.

By 1897, 275 pupils were in attendance at the school of whom 25 attended day classes. The art work at that time was divided into three main sections comprising (a) preparation for Government examinations, (b) secondary art examinations and (c) technical art which included metalwork, pottery, etc. This year was a year of record achievement, the School standing in the forefront of the four Northern Counties and gaining Gold and Silver medals in the National art competitions sponsored by the Board of Education.

By the end of the century the student numbers had reached in all 380. 1901 saw the retirement of Mr.Woodhouse Stubbs through ill-health. It is pleasing to record that he is known as late as 1937 to have held exhibitions of flower paintings in London when he sold work to the late Queen Mother. It is believed he was almost 90 years of age. In his place came Mr.C.H.Rogers,A.R.C.A., ex-Principal of the South Norwood School of Art. It is still interesting to note that in this year full-time classes as we now understand them were still not in existence, the school being run on 5 mornings, 2 afternoons and 5 evenings. At the beginning of the century a new Technical College was established in Sunderland and the Art School assumed

the title of Central Government School of Art. Its old title of School of Science and Art, which it had held for over 40 years and which is still etched into the side door of the Town Hall, soon to be replaced by the new Civic Centre,) designed by Sir Basil Spence, was dispensed with and in 1902 the small science section no longer formed part of the school.

Numbers continued to increase over the next few years nd in 1907 another report by H.M.I. stated that accommodation t the Town Hall was unsatisfactory in that it caused over- rowding in evening classes. Main subjects of study were still esign, modelling, pottery, painting and the various artisan raft works which were held, in the main, in the evenings. hroughout this period the school continued to register successes n National competitions, and was steadily building up a eputation which it maintained for many years. (1)

Although ovecrowded in June 1910, a new course was stablished in Architectural Design to run on two afternoons each week for 30 weeks. The students fee for this was 5/- per quarter or 12/6 for the course(2) In September , classes for School teachers in brushwork, painting and primary art were arranged on Friday afternoons and Saturday mornings. The quality of the staff is amply illustrated when in October, the Assistant Headmaster , Mr D.Sinclair resigned after winning a scholarship at the Royal

College of Art(3) This success was continued in 1911 when the Headmaster, Mr.Rogers reported , at the annual prize giving that four ex-students were continuing their studies at the Royal College of Art.

The H.M.Inspectors' report(4) ~~found in vol.8 H.E.S.C.minute book, dated 1st.Feb 1913~~ tells us of " a school whose organisation and management appear to be efficiently provided by the Governing Body. The equipment was generally satisfactory, only needing minor improvements, especially for the sections which had been recently developed. The staff, lead by an enthusiastic Head was well qualified and thoroughly capable of dealing efficiently with the respective duties which they were required to perform. The Inspectors were satisfied that adequate provision was made to meet the demands of students connected with the artistic industries of Sunderland and also for students who attended for professional art training. They considered the Practical class for Painters and Decorators as very useful and also the way that Embroidery had been developed systematically and introduced into the course of Elementary School Teachers. The course in the Teaching of Drawing, taught chiefly by the Head, for school teachers was very impressive " The methods of instruction are sound and the course forms a valuable training for those engaged in teaching school children."

In March 1914, at the Managers meeting, Mr.Rogers

he intimated his pleasure at the good work being done in this field.(7)

On the 15th.April,1918, Mr.C.H.Rogers,A.R.C.A., once more resigned as Headmaster,(8)this time because he had been made Head of the Torquay School of Art. Mr.R.A.Ray,A.R.C.A.(London), who had been Assistant Master for four years, was appointed Headmaster of the Schoolcof Art for the duration of the War,but held this position for a further 31 years. His salary was £300 per annum and for this he had to be Headmaster of the School of Art, teach the Elementary School Teachers on Saturday mornings and lecture to the students at the Day Training College. For the third time in the records of this period, there is found a plea to provide a scheme for training disabled sailors and soldiers but nothing is ever done. The School, which stayed open all through the War had to be closed when the Influenza epidemic struck in late 1918. The salary of an assistant who died at this period was £190 per annum.

After 1919, the School of Art began to make much progress under its new, energetic Head, The Art studies of the school had been predominately in the field of fine art, but he began to develop a growing appreciation of the need to ally good art with industry, to make good design as essential an aspect of manufacture as the purely engineering processes. The local industries upon which the School could have some bearing were painting and decorating, dressmaking, millinery, photography, stone carving and wood carving;

resigned, influenced by the reduction of the Grant for the school from £440 to £350(5)This reduction was based upon Article 33 of the Board's regulations for Schools of Art which states " Provided that the arrangements and organisation of the work as a whole are satisfactory for the purpose, the Board may make a fixed annual grant in respect of any efficient School which occupies a definite place in the educational scheme of the area.---- This grant---will remain the same from year to year subject to re-assessment based upon the character, efficiency and volume of the work of the school." The character of the work at the school had not changed as the H.M.I. report stated; " The School generally is well organised. Both Teachers and Students appear to be interested in their work and there is evidence of vitality in all departments." The Managers refused to accept Mr.Roger's resignation and restored the grant, over the years.

The War caused the usual dislocation, Evening classes were reduced to 3 evenings a week, Scholarships and examinations were suspended and in 1915, the numbers enrolled dropped from the 1914 total of 154 to 95students(6) but the grant increased to£400, for the year ending 31st.March1916. In January 1917 the Board of Education's ' Suggestions on Courses in Design applied to Manufactures' was referred to the Headmaster by the Managers and when H.M.I.Mr.Kidd visited the School in March

in addition domestic glass ware and brown earthenware were still made in the district, whilst the cabinet making industry and that of decorative plaster work were increasing in importance after the war. Therefore, although there was no staple artistic industry in the Town, about 5,000 persons living in the Borough were employed in industries upon which Art had some bearing. Thus it was not unreasonable to assume that quite 10,000 Sunderland people were dependent upon the future prosperity of these industries. Accordingly, in the decade after the War, the Head was commendably active and successful in promoting classes which met the requirements of those engaged in local industries, and the industrial work of the School made remarkable growth. New classes were started every year. In Feb.1919, authority was given to organise a class for metal workers, providing not more than £14 was spent on apparatus(9) June 1920, saw a class in photography established for which £5 was allowed for equipment. By December 1920, classes were held two evenings per week for Painters and Decorators. The numbers by now were such that a Special Sub-committee of Managers was formed to inspect the Athenæum Buildings to ascertain whether any portion was suitable for School of Art purposes. In Jan.1923, the local Press was full of the good work being done in the School of Art and the Managers placed on record(10) their appreciation of the splendid work of the Headmaster, Mr.Ray,

A.R.C.A., in designing and erecting the War Memorial for the Town. This, in a way, was disappointing because (~~in vol.13.H.E.S.C.M.Book~~) in March,1919 (11) the Chairman of the Managers intimated that the Museum Libraries' Committee were suggesting that the best War Memorial to the Town should be a new Free Library, combined with a Modern School of Art. The Managers agreed and were unanimous in the opinion that " the time had now arrived when the question of providing adequate, suitable accommodation for School of Art purposes should be considered." Nothing came of this, but new classes continued to be established, that of Leatherwork in May 1924, and in September 1925 an important Special Class in Cabinet (12) making for which £25 was provided for equipment. By now there was a record number of students, over 340 being on the roll. The rapid growth in this period can be seen from the following table:- (13)

School Year.	No. of Full-time Students.	Total Number of Students	Total Hours of Attendance.
1918-19	6	114	13,240
1924-25	23	300	38,760

The remarkable increase in students of the industrial type taking courses directly related to their callings, can be seen from the next table :-

Type of Student	Number of each Type	Number of subjects. 1	2	3	4	5 or more
Full Time	22	-	-	1	-	21
Mainly Day	28	12	10	5	-	1
Professional	3	2	1	-	-	-
Industrial:-						
Painting and Decorating	48	12	6	29	-	1
Cabinet Making	46	-	-	46	-	-
Printing Trades	21	12	9	-	-	-
Architects	6	2	4	-	-	-
Plasterers	4	1	2	-	1	-
Monumental Sculptors	3	3	-	-	-	-
Dressmakers	3	3	-	-	-	-
Miscellaneous	13	9	2	2	-	-
Teachers	53	21	20	6	5	1
Mainly Evening	81	60	5	7	1	8
	331	137	62	96	7	32

(14)

This table also shows the usual reliance on evening work and that most students were only concerned with one course.

The rapid growth of the industrial classes necessitated much change in the use of the accommodation. Rooms used for

elementary drawing and design were now used for painting and decorating, cabinet making, embroidery and millinery. Rooms formerly used for advanced work only, were now shared by other classes often at the same time. The Report of the H.M.I.s upon their visit of the 1st to the 4th. of February 1926 says of the premises and equipment:- " The School occupies the same premises as at the time of the last detailed Inspection (1919) and many of the chief defects mentioned in the Report of that Inspection still exist --- -- While the excellent position of the School in regard to its accessibility and to the freedom of control it enjoys have considerably facilitated the splendid work already done, yet the very important growth of the industrial side necessitates more elbow room, and until adequate accommodation becomes available, important instruction relating to local industries must continue to be hampered in a very undesirable way."---- " The meagre facilities available have been used to the fullest advantage, but it is doubtful if the present obvious enthusiasm can be maintained unless adequate equipment is provided for practical work." This Report is a useful source of information about the School at this period. The staff consisted of the Principal, 2 full-time assistants and 9 part-time assistants. The 2 full-time assistants taught for 26 hours a week. Of the part-time teachers assisted in the elementary subjects and 7 were specialists

teaching trade subjects; of these, 3 taught painting and decorating 2 cabinet making, 1 wood carving and 1 millinery. The School was open on 6 mornings, 4 afternoons and 5 evenings making a total of 35 hours a week. Classes were given in Elementary-Drawing, Intermediate Drawing, Advanced Drawing, Elementary Design, Painting Modelling, Architecture, Design for Illustration, Cabinet Making, Typography, Painting and Decorating, Stencilling, Wood Carving, Leatherwork, Embroidery, Jewellery and Metal Work, Writing and Illumination, Millinery and the Teaching of Drawing for Elementary School Teachers.

What impressed the Inspectors most however, was the great progress that had been made in regard to co-operation with employers. They said " The fees of no fewer than 94 students are paid by employers; among the trades concerned are painting and decorating, cabinet making, and plastering. The Masters' Federation in some trades require that their apprentices shall attend the School, and the employers generally show interest in the work done. For certain kinds of instruction the School equipment is inadequate, and this deficiency is often met by employers offering facilities in the shop for the completion of school work; they have also made gifts of material, etc., to the School amounting to the value of about £130." (15)

It was nearly ten years before the growing design section

of the School could find the elbow room it so sorely needed. In 1928 a Class of Decorative Plaster Work was authorised, using temporary premises adjoining the Town Hall provided that the cost did not exceed £12. Once more the same story is repeated as in the case of the Training College and the Technical College. On page 191 vol.21 of H.E.S.C.M.Book* is a letter from the Board of Education, dated 20/2/1930 which said(16) " The Board regret to note that no provision is made in the Authority's Programme for improving and expanding the premises of the School of Art, to the inadequency of which attention has been called in recent Full Inspection Reports. They trust that the Authority will give this matter consideration with a view to the provision in the near future of more adequate accommodation in this school. It is in the Board's view of great importance that Schools of Art should be in a position to offer guidance and inspiration to teachers.---------- " in reply the --- Sub-committee of Managers recommended that Board be informed that, having regard to the demands of other local Services, it is impossible to consider any scheme for providing new premises at the present time. " In December,1930 the Works Sub-committee were requested to investigate the question of providing suitable premises for the Art School(17) Their suggestion, minuted in June,1931, was to acquire Ashbourne House which had been given, along with extensive grounds, to the Corporation, by Mr.T.W.Backhouse, a descendant of

* H. E. S.C.M. HIGHER EDUCATION SUB COMMITTEE MINUTE

the first chairman of the Sunderland Schools' Management Committee. It was estimated that this could be altered at a cost of about £5,000 and furnished for £350. After two years, passing through various committees, the cost had risen to over £6,145-5-0 but the plans were passed in April, 1932 and approved by the Board of Education on the 24th. october, 1932. Once more the Parks' Committee objected but this time were overruled and on the 6th, June 1934, Alderman Mrs. Bell, J.P. opened the new Art School in Ashburne House, Backhouse Park, naming it the College of Arts and Crafts. On the 7th. May, 1934, the Managers of the School of Art met for the last time because at their next meeting on the 19th. June, they were called the Governors of the College of Art & Crafts, although the Board did not recognise it officially as such until 1951.

The House had been converted into a very useful Art School, and the grounds into a public park (Backhouse Park), which owed much of its attractiveness to its delightfully, natural and unregimented condition, From 1934 until the outbreak of the war in 1939, the school continued to average approximately 22 full-time students per year and about 300 evening students, but in the session 1939-40 these figures dropped considerably and no record of student numbers is available for the following five years, though it is known that they were low. The full-time staff consisted of the Principal and two assistants. In 1943, the school came near

to destruction when it was straddled by a stick of bombs, the nearest of which fell on the bridge over the stream in the park less than 100 yards away. Fortunately damage was restricted to broken windows and frames. Fire watching took place nightly by staff and students and generally speaking the school marked time and waited for the end of the war.

The next record of full-time student numbers comes in 1945-46 when with many ex-forces personnel in receipt of maintenance grants, there were 38, the highest ever, whilst a total of 611 students were enrolled in Day and Evening Classes. For the next session 1946-47, the number of full-time students rose to 72, at which figure it stayed fairly constant for the next four years. The total number of students attending were as follows:- 1946-47 736 1947-48 763 1948-49 780 1949-50 705 (50) This shows a large increase from the pre-war figures and was largely due to the increased popularity of the Evening Classes, especially the Craft class which was crammed to capacity owing to a shortage of leather goods in the shops and rationing of clothes.. In 1948 312 students attended classes in leatherwork alone and 127 students took dressmaking. With the end of rationing evening classes returned to more normal figures of between 500-600, which is still double the pre-war attendance.

All these extra students created an urgent need for the provision of additional staff, accommodation and equipment. In January, 1947, suggestions were made at the Governors' meeting that further premises should be aquired and the present College be retained for work in the Fine Arts. Accordingly, it was resolved; "that authority be given to inform the Regional Committee that the Sunderland Education Authority would make arrangements for the provision of an Art College with full facilities."(21) From the Prospectus of that year 1947-48 the College offered ;-

THE FINE ARTS

Portrait Painting.	Architecture.
Mural Decoration.	Engraving.
Landscape Painting.	Etching.
Miniature Painting.	Design for Interior
Modelling and Sculpture.	Decoration.

ADVERTISING AND ILLUSTRATIVE ART.

Book Illustration.	General Commercial Art.
Black and White Work.	Fashion Drawing.
Poster and Show Card Work.	

TRADES AND CRAFTS.

Embroidery and Needlework.	Basketry and Cane Work.
Hand Loom Weaving.	Textile Printing.
Furniture Designing.	Dress Designing and Making.
Furniture Making.	Millinery.
Bookbinding.	Window Display.

Plastering. Painting and Decorating.

Stone Carving. Pottery.

Signwriting. Stained Glass Window Making.

On the 9th.Sept.1949, Mr.R.A.Ray,A.R.C.A., who had served the College Of Art, first as an assistant for four years, then as Principal for thirty one years, retired. He was replaced by Mr.Walter John Norman,A.R.C.A.,A.T.D.(22) who had trained at the Winchester School of Art, the Royal College of Art and Goldsmith's College, London, and had been Principal of the Ryland Memorial School of Art, West Bromwich. In Feb.1951, with the increased number of students, the Governors decided " that authority be given to the Director of Education to make application to the Ministry of Education for the recognition of the Sunderland School of Art as a College of Arts and Crafts(23) The Ministry gave approval, the school receiving the title of College of Art and it was then recognised under the scheme for Further Education of the Northern Advisory Council as being an Area College.(see page 136 for definition)

By the session of 1951-52 the numbers of full-time students had risen to over 90 and 490 were coming to Evening Classes. A breakdown of the figures is;-

Full-time Students. Min. of Ed.	60
" " " Other Courses	30
Part-time Day "	20
Day Release. Wednesday and Saturday	55
Juniors on Saturdays only	45
	210

(24)

To alleviate overcrowding, No.5. The Cedars was acquired on a 5 year lease and the whole of the Fine Art Department transferred there. The College was now organised into four main departments constituting :- The Department of Fine Art.

The Department of Interior Decoration.

The Department of Illustration & Commercial Design

The Department of Dress and Allied Industries.

The Department of Fine Art, with a staff of four, gave lectures in painting, engraving and sculpture. That of the Interior Decorating with a staff of seven, gave instruction in all forms of design related to interior decoration, furniture, textiles, pottery and tile decoration. The Department of Illustration and Commercial Design had a staff of four giving courses of instruction for the training of Commercial Artists, Illustrators, Fashion Draughtsmen and Display Artists. The largest department, with a staff of nine,

was that of Dress and Allied Industries, which provided Courses of instruction for students seeking employment as Dress Designers, Dress Makers, Embroiderers, Milliners and Tailors. Students were prepared for the following examinations :-

(a) The Intermediate Examination in Art and Crafts.

(b) The National Diploma in Design, which includes Painting, Sculpture, Illustration, Interior Decoration, Dress Design, Textile Design, Weaving, Advertising Design, and Industrial Crafts.

(c) The Examinations of the City and Guilds of London Institute, including Dressmaking, Teachers' Handicrafts, Embroidery, Painting and Decorating.

(d) The Examination of the Institute of British Decorators.

(e) The Entrance Examination of the Royal College of Art, the Slade School of Fine Art, and the Royal Academy Schools.

Teachers' courses for students wishing to qualify as Art Teachers were also organised and a two year part-time course for selected pupils of Primary and Secondary Modern Schools was held on Saturday mornings and Wednesday afternoons.

In May 1951, H.M.Inspectors issued a Survey of Vocational Art Education in the Northern Division (25) which can be found in vol.35 H.E.S.C.Minute Book. This covered the North Riding of Yorkshire, County Durham, Northumberland, Cumberland and Westmorland and showed that Sunderland College of Art was no worse and in many instances

better than the other 7 Schools of Art, as the following extracts well show. The place of Art in the scheme of Further Education is justified by:- "Until recently, the area has relied for its livelihood mainly upon heavy industry, mining and shipbuilding, but with the development of the trading estates and a steady flow of light industries to the North, it is reasonable to expect an increased demand for vocational training in industrial, commercial and trade crafts...There should, however, be no doubt at all that the School of Art has an obligation within the field of Further Education to set a high standard both in design and craftsmanship in all forms of Vocational Art Education". The lack of equipment in all of the colleges seems to be general as shown by..."a) In almost all the vocational work, whether it be Textile Printing, Typography, Painting and Decorating, Furniture or Dress, it is usual to find students working with limited or out-of date equipment. and b) Inadequate Workshop Facilities - mainly in Painting and Decorating." Sunderland College of Art could take pleasure in the following; "With the exception of West Hartlepool and Sunderland, where recent Dress Designing and Making has taken place, there is a need in all centres for an improvement" and in " The main concentration of Cabinet Making work is at Sunderland where apprentices from furniture manufacturers

and shipbuilders form the bulk of students."

The conclusions arrived at in the Survey are important indicators of the way Art Education should develop in the North and some of these were :- "The main subjects in volume of work are Painting and Decorating, Typography, Art Teaching, Commercial Art and Dress. The Schools of Art should endeavour to meet local requirements in Textile Printing, Pottery, Architecture, Stone Masonry and Furniture. The Schools are making contact with local industries but as yet, they are not able to cater for the technical requirements of such industries. There is little evidence of regional co-operation between the Northern Schools. Most Schools show a continual growth and a point may be reached when some federal arrangement between certain Schools may be necessary for further expansion. Accommodation is, in most cases inadequate for present and future needs. Suggestions were;- 1. There should be a special bias towards Commercial and Industrial Design.

2. There is need for improved accommodation and equipment in most Schools of Art.
3. A closer link should be forged between the Technical Colleges and the Schools of Art.
4. Certain subjects at National Diploma level or Post Diploma level should be confined to regional centres.

5. A higher standard should be set in most of the vocational work.
6. A more powerful approach should be made to Industrial Design.
7. Consideration might be given to the establishment of a regional centre for Typography, Lithography and Photo process Reproduction at Newcastle, with a second centre for advanced work in Typography at Middlesbrough."

In an attempt to fulfil its obligations to the area, additional premises were obtained in other parts of Sunderland. An approach was then made to the Ministry of Education for extensions to be added to the main building. Approval was finally given in 1955 and by the 4th.October 1957, the £100,000 extensions, which virtually trebled the size of the College premises, were in full use. A cutting from the Sunderland Echo 26.9.57 shows the ever increasing problem of trying to cater for the growing needs of Art Education.

" So many students are being enrolled at the Sunderland College of Art and Crafts that even after the Backhouse Park extensions are opened next year, there will not be sufficient accommodation. To meet this need Sunderland Education Committee will be recommended to continue No.6.The Esplanade, which they took over after the Central Purchasing Dept. moved to Havelock Road. The Esplanade will be used partly by the Fine Arts dept. and lower level courses, to keep the main college building for advanced work. "

An indication of the growing value of the College can be seen

from the figures given in the Burnham Technical Report of 6.10.59.

Sunderland College of Art and Crafts.

STUDENT NUMBERS

Year	Full-time Day	Part-time Day	Evening	Total
1956	127	182	491	800
1957	142	242	472	856
1958	158	256	503	917
1959	202	304	549	1055

The year 1960 was important for the way the Art College co-operated with the other Institutions of Higher Education. In April, a scheme was drawn up whereby the Art College would co-operate with the Art and Crafts Department of the Training College, in order that work of a more advanced standard could be carried on in the extra time now available due to the course of teacher-training being extended to three years. In October the Art College jpined with the Technical College and West Park College of Further Education to celebrate their Centenary (26) This was also a year in which the future developments of higher education in Sunderland lay in the balance. As previously described, the Training College was concerned with its new three year course, the Technical College was uncertain as to its future affiliation to Durham University, its future as a College of Advanced Technology or indeed its future at all, after the Robbins Report. The Art College, in its turn, was awaiting the

decision of the National Advisory Committee on Art Education as to its future designation. On the 12th.February 1961, a summary of the recommendations contained in the First Report of the National Advisory Council on Art Education was submitted to the Governors. The parts affecting Sunderland College of Art were as follows :-

1. The Intermediate Certificate in Arts and Crafts and the N.D.D. were to be replaced by a new diploma, the Dip.A.D. of much higher standard.
2. The N.D.D. examinations would be offered for the last time in 1965; the Intermediate Arts in 1963.
3. The number of Colleges of Art allowed to offer the new course would be restricted. Colleges had to apply before the 31st.Dec. 1961 to the Ministry and the National Council for Diplomas in Art and Design for approval. (In many ways this was similar to the proceedure followed by the Hives Council for Technological Awards.)

4. The new Principal, Mr.Wilfred G.Kelly from Bromley, Kent, who had replaced Mr.Norman after his appointment as Principal of the Liverpool Regional College of Art, stated that it was intended to submit proposals for courses at the College of Art in all four areas of specialisation viz., Fine Art, Graphic Design, Three Dimensional Design and Textiles and Fashion. Since the College would be reviewed by the Summerson Committee (set up by the Minister to

grade Colleges of Art and to allocate the new Diplomas in Art and Design) it was intended to improve its facilities. On the 15th. June 1960, the property known as Moorlands, Ryhope Road, was bought by means of a compulsory acquisition order with a view to using it as an additional temporary Art Teaching block. This gave more space in the main College to enlarge the Library which was inadequately stocked if the College was to be considered as of the First Grade. A major building programme, extending to 1967, was planned, involving £21,318 being spent on Moorlands, a Hostel of approximately 31,120 sq. feet costing £124,480(97) extensions to the main premises and a Students' Union. Government approval for all of these plans, waited on the recognition of the College being suitable to offer the new graduate Diploma in Art and Design in the area of Fine Art. This recognition was received on the 7th May 1963(98) and it opened a new chapter in the history of the College since it meant that the College now offered a course which was the equivalent of a degree. The interest in this Diploma was so great that the pre-Diploma course was immediately full in its first session and the increase in numbers necessitated the provision of more accommodation, and the transfer of courses, leading to the City and Guilds of London, Institute of Domestic Dress to the Monkwearmouth College of Further Education from Sept. 1964(99) The College benefited from the general expansion of all forms of higher education in the era after

Robbins. The necessary additional accommodation was provided by 1969, the year that the Art and Technical Colleges re-combined to form the Sunderland Polytechnic.

Today, the College, with its full-time staff of 32, its courses leading to the award of Diploma in Art and Design with specialisation in 1) Fine Art, 2) Graphic Design, 3) Three dimensional Design- including Engineering Design, and 4) Textiles/ Fashion, has certainly moved a long way from the original School of Science and Art, 1841 (39) with its part-time staff of 6 and its students of young ladies and courses in painting.

Chapter 8.

Development of Further Education in England and Wales, with an emphasis on Technical Education.

Before considering the development of higher and further education in Sunderland in particular, it will be better to look at their growth in general on the national scene. Further education belongs chiefly to the post war era and as far as Sunderland is concerned, Higher education means Technical education. Indeed, before 1908, much of Technical education could be considered as adult education, which, in turn, should have been considered as either secondary or primary education. Many famous educationalists have encountered this difficulty and it is interesting to note what they have written. Graham Balfour once said..."It is very difficult to give a clear and yet adequate account of the movement which in this country has been comprehended under the name of Technical Education. For one thing, circumstances caused the term to be applied to a great deal of secondary instruction which had not the slightest claim to be considered technical, either in its treatment or its content. There has been no recognised central authority except the Department of Science and Art which began its career with no definite recognition of a

difference between technical instruction in particular and secondary education in general, and in consequence only made confusion worse confounded. Technical education was never dealt with as a whole in England either by statesmen or educational authorities". (1) Charles F.Carter, Vice-Chancellor of the University of Lancaster writes..."Education remains a mysterious process; we are sure neither of how best to achieve results, nor of what results we want to achieve. Technical education, though it may seem to have the simple function of providing the developed skills needed by society, must now in reality prepare people to develop skills which have not yet been imagined, required by technical or commercial processes not yet conceived; and it must do this in a way which has regards to the universal needs of general education". T.H.Huxley referred to it as .. .."that sort of education which is specially adapted to the needs of men whose business it is to pursue some sort of handicraft" (2) or as .."instruction in that kind of knowledge which it is essential to the several branches of trade and industry" (3) The Technical Instruction Act of 1889, however, defined it as .."instruction in the principles of art and science to industries, and in application of special branches of science and art to specific industries or

employments. It shall not include teaching the practice of any trade or employment".(4)

Adult and technical education did not exist before the industrial changes of the 19th.century and can be conveniently divided into the following periods:-

a) Before 1851 (the year of the Great Exhibition).

b) 1851 to the Education Act of 1902.

c) 1902 to the Education Act of 1944.

d) 1945 _____ 1969.

Between 1800 and 1850, further education or 'Adult Education' was promoted solely by voluntary agencies and it was influenced and developed by three main factors. These were religious-philanthropic, an interest in physical science, and the social and political agitation which later became the Chartist movement. J.W.Hudson in his 'History of Adult Education' tells of the work of John Pierson and John Reynolds, of the Birmingham Sunday Society, the efforts of William Singleton,a Methodist, and Samuel Fox, a member of the Society of Friends, to teach adults to read the Bible. Robert Peers in his 'Adult Education' tells of the impact of Methodism, prodded by John Wesley, and the Quakers. Opposition to these early attempts at education was strong and can be summed up by Mr.Giddy, President of the Royal

Society, when he opposed Whitbreads' Bill of 1807..."However specious in the theory, the project might be of giving education to the labouring classes of the poor, it would in effect be found to be prejudicial to their morals and happiness; it would teach them to despise their lot in life, instead of making them good servants in agriculture, and other laborious employment to which their rank in society had destined them; instead of teaching them subordination, it would render them factious and refactory, as was evident in the manufacturing counties; it would enable them to read seditious pamphlets, vicious books, and publications against Christianity; it would render them insolent to their superiors; and in a few years the result would be that the legislature would find it necessary to direct the strong arm of power towards them, and to furnish the executive magistrate with much more vigorous laws than were now in force". (5)

The increasing use of machinery and steam power in the development of factories reduced some of this opposition and factory owners began to encourage their workmen to take an interest in their machines and the appropriate industrial processes in which they were engaged. Thus the Mechanics' Institutes made rapid progress in the first half of the 19th. century. Mechanics' Institutes originated in Glasgow, where in

1760, Professor John Anderson gave lectures in practical physics to some workmen. Later in 1799, Dr.George Birkbeck, Professor of Natural Philosophy and Chemistry in the Andersonian Institution, gave lectures to workmen who made his apparatus. In 1804, he left for London, but his successor, Dr.Ure, continued the classes and in 1823, saw the first Mechanics' Institutes founded, first in London, then in Glasgow. By 1826, the first Annual Report of the Committee of Sunderland Mechanics' Institution was published. The objects were...."to educate the illiterate, to direct the studious, to afford every necessary aid to the intelligent and ingenious, and to assist every mind aspiring to knowledge". (6)

By 1850, there were 610 Institutes in England and Wales with a membership of well over half a million. Many of the institutes were founded by members of the middle class, inspired by various motives..."Employers such as Alexander Galloway sought better educated and more industrious workmen; politicians such as Brougham hoped the institutes would provide training in self government; philanthropists such as William Wilberforce hoped they would alleviate the poverty and misery of the working class; parsons such as Rev.E.Higginson of Derby, looked to them to establish respect

for the laws and a ready obedience to them, that due subordination of rank on which the well being of every gradation in society demands; and the faithful discharge of all those duties which we owe to the whole community."(7) Only a minority of people regarded the institute as Birkbeck did, as agents of cultural education, as a means of liberating the mind and enriching understanding. The workers themselves regarded the lack of education as a symbol of inferiority and saw education via the institutes as a means to social and political emencipation. The lack of a national system of primary and fundamental education took its toll and soon most of the institutes were taken over by the middle classes and Engels wrote...."Here all education is tame, flabby, subservient to the ruling politics and religion, so that for the working man it is merely a constant sermon upon quiet obedience, passivity, and resignation to his fate". (8) Other sources of Adult Education were the infant trade unions , the Chartist movement and the Co-operative movement, but none of these could achieve much success until the universal dissemination of fundamental primary education was achieved and this had to wait until 1870.

The State had had little influence on the development of technical or science education, but by the 1830's,

Britain's industrial supremacy was becoming challenged and the value of technical and scientific instruction was beginning to be officially recognised. A Select Committee of the House of Commons (set up by the work of William Ewart) to inquire ..."into the best means of extending a knowledge of the Arts and of the principles of design among the people (especially the manufacturing population) of the country"., recommended the establishment of a Normal School of Design, for which the sum of £1,500 was voted. The first school opened in rooms in Somerset House in 1837, and by 1851, the grant had increased to £15,000, for about 17 provincial schools had been established and they were now supervised by the Board of Trade. In 1852, the Normal School of Design became the Department of Practical Art in the Board of Trade. By 1853, a Science Division was added and it became known as the Science and Art Department of the Board of Trade, housed at South Kensington. In 1845, the Royal College of Chemistry was formed and in 1851, the School of Mines was established and one of its original staff was Lyon Playfair, who had a striking influence on the technical education of the future. Thus by 1851, Britain's industrial supremacy was beginning to be challenged, an almost complete lack of elementary education was the greatest impediment to the establishment of a system of technical

education, and technology was considered to belong to the lower orders, whilst science was no longer one of the attributes of a gentleman. But by the Great Exhibition, England was still not under too great an economic pressure to need to improve the quality of its workers. Labour was plentiful, the population was increasing, skill and responsibilty in industry still low. Action by the State would have increased taxes and been against the Victorian doctrine of self-reliance and laissez-faire..."Not until technology and social organisation became more complex and foreign competition more acute did it become essential to reduce the wastes, as well as to continue the achievements of the mid-Victorian economy". (9) For several years after its creation, the Science and Art Department played but a small part on the educational scene. In 1851 there were 38 science classes teaching 1,300 pupils in ten years there were only seventy schools and 2,543 pupils at a cost of about £898 in all. (10) Lack of adequate, suitably qualified teachers was the chief problem and to remedy this, the Department instituted a special examination for teachers of science in 1859. The remuneration of qualified teachers depended upon the number of pupils who passed the special examinations held by the Department.

These examinations lasted for about 40 years, were

very theoretical in character, included no practical or manual work, and were regarded with suspicion by many employers. The Department also offered help to cities wishing to start schools of science or any school or part of a school such as Mechanics' Institutes etc. After 1870, Board schools often increased their grants by taking South Kensington examinations. The popularity of these examinations increased until payment by results gave way to payment by inspection in the eighties and nineties. Whilst the Department of Science and Art concentrated on the theoretical side of science, the practical side was taken over by other bodies, chiefly the "City and Guilds". In 1876, a meeting of the City of London Livery Companies at the Mansion House resolved..."that it is desirable that the attention of the Livery Companies be directed to the promotion of Education not only in the Metropolis but throughout the country, and especially to technical education, with the view of educating young artisans and others in the scientific and artistic branches of their trades". (11) As a result, in 1880 the City and Guilds of London Institute for the Advancement of Technical Education was incorporated, and took over and expanded the system of technological examinations begun by the Society of Arts, and it insisted on certain minimum qualifications for teachers of classes

registered with it. In 1880, there were 24 subjects,816 candidates and 515 passes, but by 1990 there were 64 subjects and 14,105 passes. (12) The City and Guilds Institute also founded the first English technical college at Finsbury in 1881, and in 1884, founded the Central Institution at South Kensington, which is today part of the Imperial College of Science and Technology. Another interesting development at this time (1880) was due to the work of Quinton Hogg at the Polytechnic in Regent Street. Thus by 1881, the Science and Art classes were beginnign to play a useful part, the City and Guilds examinations and its College at Finsbury were setting new standards, men like Playfair, T.H.Huxley and Quinton Hogg were breaking down the barrier of laissez-faire and probably the most important of all, there was now a national system of compulsory primary education. The next twenty years now saw the cause of education in general and technical education in particular make more rapid strides than ever before. The Paris Exhibition of 1867 showed up the disquieting fact that British Industry and Engineering was being surpassed by France, Germany and the United States. Lyon Playfair, as a result of what he noted there wrote to Lord Taunton claiming that..."foreigners believed that we had made little progress since 1862....our engineers and scientists ascribed our failure....to the

system of technical education developed in European countries for the masters and managers of industry!' (13) This lead to the appointment in 1881 of a Royal Commission on Technical Instruction..."to inquire into the Instruction of the Industrial Classes of certain Foreign Countries in technical and other subjects, for the purpose of comparison with that of the corresponding classes in this Country!' (14) In the main recommendations of the Commission were these:-

1. That drawing, with metalwork and woodwork, should be encouraged in the elementary schools.
2. Science and Art Classes should be established and maintained by school boards and local authorities. That in these classes the science subjects should be more practical and that the grant for buildings should be increased.
3. That science in teacher training colleges should be increased.
4. That scientific and technical instruction should be greatly increased in the endowed secondary schools of the country.
5. That the rate limit in connection with public library provision should be raised. (15)

This report stimulated the authorities to realise the need not only of first class technical institutions, but also

of an adequate supply of secondary schools in which the instruction given would lay the foundation for later technical training. One result of this Commission was the formation of a ginger group which founded in 1887, the National Association for the Promotion of Technical Education (later it added Secondary.) A more important result of the Inquiry was the Technical Instruction Act of 1889 which gave power (permissive) to the newly created county and county borough councils, to levy a penny rate in order to supply technical instruction by founding schools and appointing teachers, to make grants to institutes, supply technical education and to establish exhibitions and scholarships. The curricula of classes and colleges so established by this money was to be subject to the approval of the Science and Art Department. By 1898, 160 local authorities were using the Act to raise £39,000 from the rates for technical education. This was followed in 1890 by the Local Taxation (Custom and Excise) Act by which certain sums out of Customs and Excise duties were allocated to local authorities either to relieve rates or to subsidize technical education. This money became known as "Whiskey Money". In 1898 out of a total of £807,000 available no less than £740,000 was spent on education, increasing to £863,847 in the year 1901-2. (16)

This was the source of much of the money which established the Sunderland Technical College. Before the 1902 Education Act there was some confusion and overlapping of functions between the School Boards, responsible for elementary education but providing some secondary and technical education, under the authority of the central education department, and the new technical education committees or boards (set up under the 1888 Act), under the aegis of South Kensington which were supplying technical and secondary education. Previously in 1895 the Bryce Commission had reported that .."education at all levels was unco-ordinated and illogical.....vested interests are being created which will stand in the way of reforms... The matter is one of urgency."

The Government responded to this in 1899 by merging the Education Department, the Science and Art Department, and the educational section of the Charity Commission into a new Board of Education with South Kensington as its secondary and technological branch. The Cockerton Judgements had put secondary education into the doldrums and the sceme was set for the 1902 Education Act which opened a new chapter in the history of English education. This Act abolished the School Boards and the technical instruction committees, and put all forms of national education under the administration

of the county councils and borough councils. The new Local Education Authorities had to appoint education committees responsible for elementary, secondary, further and higher education and they could award scholarships and pay fees.

Although the Act of 1902 gave a great impulse to higher and secondary education, it did not lead to any immediate increase in material facilities for technical education. The Board did not contribute towards the cost of new buildings for technical education, which therefore fell on local rates and L.E.A.s in many cases concentrated their resources upon Secondary Schools and the training of teachers. What the L.E.A.s did do, was to co-ordinate the numerous and varied types of instruction given in Evening Schools to suit local conditions. They tried to provide the following types of further education establishments:-

1. Continuation schools - offering a two years general course for school leavers of 13 or 14.
2. Branch technical & commercial schools - for secondary school leavers of 15 or 16.
3. Central technical & commercial schools - for students of higher ability who had passed out of 1. and 2.

The Board of Education Report for the year 1909-10 stated that 20% of the 750,000 students in evening schools failed

to complete enough attendances for the L.E.A. to earn grants for them. Numbers of day students were very small and evening students provided quantity rather than quality. In 1902, the Halifax Evening Continuation School introduced the group system which spread throughout the North and was adopted by the Board of Education in 1910. This group system meant that students in further education pursued a course made up of a number of related subjects, instead of working haphazardly. This system was of greatest value to the students who intended entering a technical school, since the subjects were grouped according to the occupations of the pupils, or the industries they hoped to enter. There were usually five main groups; industrial; commercial; rural; domestic; and general. In all courses, instruction was given in English. These developments, together with the 1904 Regulations which made grants applicable to any subject, led to the possibility of moving from an elementary school to a trade or technical training. Courses provided by the evening technical schools were classified into - junior (14yrs. - 16yrs. taken in the evening continuation school); senior,(taken in a technical school lasting 3 years from the age of 16); and advanced - (taken for 2 years in the larger technical schools - now called colleges.) The Thompson Committee reported in 1918,

after spending two years inquiring into technical education. It found that pre-1914, only 7% of the male population was getting any sort of trade instruction. This instruction also tended to emphasize the scientific principles on which industrial processes were based (i.e. according to the Act of 1889). Therefore, the Committee urged that greater efforts should be made to develop technical education in all its aspects.

The most far reaching development of this period was without doubt, the inception of the National Certificate scheme. In the 19th. century, technical and scientific instruction had been moulded by the examinations, first of the Science and Art Department, and then the City and Guilds of London Institute. These bodies had abandoned their lower examinations by 1918 and were replaced by examinations conducted regionally by unions of L.E.A.s and schools, such as the Union of Lancashire and Cheshire Institutes, the East Midland Educational Union (1911) and the Northern Counties Technical Examination Council (1921). This was not altogether satisfactory since the certificates given were those of regional bodies and not national ones. The need for a nationally recognised qualification in technology, which gave to industry a qualification that combined both practical

and theoretical competence and yet was flexible enough to allow schools and colleges academic freedom, was first introduced in 1921, when the Institute of Mechanical Engineers, in conjuction with the Board of Education, developed a scheme to issue national certificates and diplomas, in mechanical engineering. This scheme extended so that by 1925 there were Nationals in Mechanical and Electrical Engineering, Chemistry and Naval Architecture; in Building by 1945; Textiles, Commerce and Civil and Production Engineering by 1946. National Certificates were awarded to part-time students and National Diplomas to full-time students by the Board of Education and the professional bodies concerned. These bodies also appointed the external examiners who assessed and moderated the examinations, which were set and marked by the schools and colleges. In addition the final result also depended on the day to day progress made in theoretical and practical studies by the student, guided and assessed by the teachers and supervisors of the schools and colleges. Normally, Ordinary National took three years and Higher National two years. Progress made by the scheme can be seen from the figures below. (17)

	1923	1931	1944
Ordinary Awards.	663	2,043	4,070
Higher Awards.	168	749	1,405

The work done in senior technical institutes was revolutionised by the introduction of national certificates and diplomas. Standards of teaching advanced, whilst a student could now gain a qualification approximating to a University degree which was recognised for its true worth by industry.

Unfortunately, the chief attitude to technical and further education, namely the reliance on evening classes, still remained between the wars. The number of employees released during working hours was as follows:-

1932 - 3	1935 - 6	1937 - 8
26,296	32,810	41,539

whilst the reliance on evening classes is well shown by the Board of Education Report on "Education for Industry and Commerce", 1928 ! This showed that in Prussia only about 10% of technical schools provided evening classes, in the U.S.A. less than 30%, whilst in England, evening classes accounted for 80 - 90% and the development of part-time and full-time day courses was urged as a matter of national importance. The chief figure behind this report, Lord Eustace Percy, a former President of the Board of Education, was very concerned with the appalling waste of the facilities of the Technical Colleges which he said..."was one of the worst examples in all educational history."

Lord Eustace Percy was also responsible for three

useful committees of enquiry, namely the Malcolm Committee 1926-28 on Education and Industry, the Clerk Committee 1931, on Education for Engineering, and the Goodenough Committee 1931, on Education for Salesmanship. The Malcolm Committee found that industrialists were still distrustful of technical education considering the teaching to be too academic and theoretical. There was little or no contact between elementary and secondary schools and industry. Much continuation school work was being vitiated by a part-time evening system and they recommended an expansion of the day release plan. The Clerk committee was impressed by the work of the junior technical schools and stressed the value to the engineering industry of obtaining recruits who had received a full-time education in them, or in secondary schools. Technical education, However, still did not take its rightful place, there was no pressure from industry for its expansion, it was a time of slump and depression, an army of unemployed could meet the demands for man power, and industry itself was still suffering from an unimaginative managment which had probably had a Classical education. Indeed, the Balfour Committee said in 1927..."until industry discovered and made known its industrial requirements, little progress could be made." (18)

The Second World War changed all this, the specialized

training schemes provided by colleges showed industry what could be achieved. Further Education trained over 300,000 men and women for industry and the Services, in its Technical colleges and its importance was realised as this part of the Education Act, 1944 states:- "The provision of further education is at present a power and not a duty of Local Education Authorities and, despite what many Authorities have done, technical education has not hitherto made that advance which the needs of a highly industrialized community demand. In particular, the standards of the buildings and equipment in use have often been deplorably low, and comparison with what can be seen in other countries which have been our competitors in the World markets can leave little cause for satisfaction." The war, whilst emphasising the value of technological education had also revealed the lack of co-ordination between the different agencies providing this. To end this, the Ministry of Education appointed in 1944, a special Committee on Higher Technological Education ..."to consider the needs of a higher Technological education and the respective contributions to be made by universities and technical colleges." Its chairman was again Lord Eustace Percy of the University of Durham, who gave his name to the Report published in 1945. This committee appreciated

fully the deficiencies in an industrial nation's educational system and its needs can be seen from the following extracts:-

"The evidence submitted to us concurs in the general view; first that the position of Great Britain as a leading industrial nation is being endangered by a failure to secure the fullest possible application of science to industry; and second, that this failure is partly due to deficiencies in education. The annual intake into the industries of the country, of men trained by Universities and Technical Colleges has been and still is, insufficient both in quantity and quality. We believe that the industrial demand for such men will increase in quantity after the war; and that the demand for higher quality, especially in certain categories, will become more insistent as the nation becomes more conscious of its need for technical efficiency. In particular, the experience of war has shown that the greatest deficiency in British Industry is the shortage of scientists and technologists who can also administer and organise, and can apply the results of research and development.....
Technological education must be conceived in terms of a combined course of works training and academic studies; and both the course as a whole and the period allotted to academic studies must be long enough to give full scope to

to the student's development. Full co-operation between industrialists and educators must be based upon a recognition by both parties, of the supreme importance of increasing the efficiency of manufacturing processes, and of initiating new branches of technology, as a means of expanding the nation's export trade and advancing its standard of living."(19)

The main recommendations of the Percy Report were as follows:-

1) Whilst Universities should emphasise the science aspect, and technological institutions the works training, a limited number of technical colleges should develop courses of university standard. These colleges would provide post-graduate courses in special technologies in new developments, for both full-time and part-time students,and carry out research into specific problems of local industry. They should have residential students, powerful governing bodies, capital grants from the Exchequer and staff salaries and conditions comparable to those of Universities.

2) Regional Advisory Councils, eight in number, should be set up for England and wales to co-ordinate technological studies in Universities and Technical Colleges, and work in co-operation with a National Council of Technology.

3) State Bursaries, begun in war-time, should be continued.

A national campaign should increase the prestige of the technical profession since the Committee believed..."the best material is not being offered....in sufficient quantities. In a word, industry and educational institution training for industry, are not getting their fair share of the national ability." This campaign should be specially directed towards public boarding schools and grammar schools, and it was hoped that the expansion of secondary education envisaged by the 1944 Education Act would be a potent factor.

4) The National Council of Technology would approve and moderate courses of study, select external examiners and give appropriate awards at lower and higher levels. There was disagreement amongst the Committee on this topic, some wanted to award a first degree of B.Tech. followed by a degree of Tech.D., for the post-graduate research; others preferred a diploma instead of a degree, whilst Lord Percy suggested awards of Associateship and Fellowship of the Royal Colleges of Technology.

5) All students of technology should be taught elements of industrial administration and management.

6) There must be co-operation between the colleges and industry. Industry should release its specialists as part-time teachers and allow teachers to work in industry. (20)

These important and far-reaching proposals suffered the same fate as many others before them. Some were ignored and others implemented so slowly that real progress was inevitably held up.

In the purely scientific field, the Barlow Report (21) reinforced the findings of the Percy Report. It recommended the doubling of the output (2,500 a year) of graduate and equivalent scientists, since the country would need 70,000 in 1950 and 90,000 in 1955. University expansion was essential and University type institutions of technology were to be encouraged, since only one fifth of the possible university entrants were admitted, leaving a large reserve of potential talent. Progress however, was still slow. By 1947, the ten proposed Regional Advisory Councils had been set up to adjust the provision of technical education to the regional needs of industry. By 1948, the National Advisory Council on Education for Industry and Commerce was created, whose function it was to offer advise to the Minister on all aspects of national policy. Its first report, in 1950, (22) dealt with technological education of a first degree standard, recommended improvements in accommodation, equipment and financing of Colleges together with the establishment of a Royal College of Technologists which

would give awards known as Associateship, Membership and Fellowship of the Royal College. Interest in this topic was encouraged by four reports of the Anglo-American Council on Productitvity, evidence from the University Grants Committee and from the Advisory Council on Scientific Policy. Full-time students in technology had doubled since 1939, and the Government considered founding a Technological University , and to seek a Royal Charter for a College of Technologists. This policy was ended by the new Conservative Government, but in July 1952, L.E.A.s were allowed 75% instead of 60% of the cost of approved advanced courses in technical colleges. This increased opportunities and by 1954, 9,500 students received advanced courses at technical colleges in England and Wales, half of whom became professional scientists and technologists. (23) This was still insufficient, as a Parliamentary Scientific Committee stated that whereas the country needed 40,000 engineers etc., only 25,000 were being produced, and the U.S.A. was training three times the number of technologists per head of population as compared with Britain. Proposals were familiar:- Universities to receive more help, more advanced sandwich courses in the Colleges of Technology, and the formation of Royal Chartered Colleges of Technology awarding the degree of Bachelor of Technology.

The Government's reply was the formation of the National Council for Technological Awards giving Diplomas in Technology. "The dead hand of tradition had hindered the adjustment of the educational system to the changing needs of society."(24)

Thus in spite of much achievement in the decade after the war, especially in an increase of the number of day release students, evening classes, and much progress in the National Certificate Scheme, as can be seen in the Ministry's Annual Reports for 1950-1955, Britain was falling rapidly behind the U.S.A. and the U.S.S.R. in the output of technicians and technologists. By 1956, the position seemed so critical that urgent action became necessary and in February, the Government issued an authoritative White Paper on Technical Education. This White Paper suggested that there were three categories of workers; Technologists with professional qualifications who have studied fundamental principles and can initiate new developments; Technicians who have undergone specialist training combined with practical work and have a good knowledge of basic mathematics and science; Craftsmen who represent the skilled labour of industry. It also described the four main categories of awards:-

1. University degrees.
2. Technical College diplomas.(normally after full-time course)

3. National Diplomas and Certificates.

Ordinary National Diploma.	(2 years full-time)	5 yrs.
Higher " "	(3 " " ")	study.
Ordinary National Certificate.	(3 yrs.part-time)	5 yrs part-time
Higher " "	(2 yrs. " ")	study.

4. City and Guilds.

Intermediate certificates. (2/3 years part-time)

Final certificates. (1/2 years part-time)

Full Technological Certificates.

The introduction to the Paper emphasized that although the number of science and technology students had doubled since 1938 we were still being outpaced by the U.S.A., Western Europe and the U.S.S.R. The main proposals to cope with this problem were contained in a five year plan of development. The output of advanced courses was to be increased from 9,500 a year to 15,000 a year. The prevention of the 50% wastage of students in technical colleges, which could not be remedied by part-time release and evening classes, lay in Advanced sandwich courses which.."would therefore probably become the main avenue of progress towards the highest technological qualifications". It endorsed the Weeks' Report (25) which recommended a Diploma in Technology, courses in management and economies, a six monthly college/ works/

college/ works schedule, good co-operation between colleges and industry, and a careful student selection procedure. L.E.A.s were to be encouraged to give Major Awards to technical college students,and firms were to be allowed to count the paying of fees, and maintenance of sandwich-course students for tax purposes as business expenses. Twenty two colleges in England and Wales were listed as eligible for the 75% grant for advanced work and these were to remain in L.E.A. control. The wastage of technicians and craftsmen was considered due mainly to a reliance on evening classes and among the remedies suggested were better selection processes and more day classes. Provision should also be made to attract and train women for industry. Finally, buildings and libraries should be improved. In May 1956, the National Council for Technological Awards, which had been set up in 1955 as an independent self-governing body to create and administer technological awards having national recognition, issued its memorandum on the Recognition of Diploma and Technology courses. Subject panels were set up for each technology, composed of representatives of technical teachers, professional institutions, and industry, and by July 1957, 49 out of 83 considered, were accepted. Finally, in 1958, the Council announced the establishment of a higher award to be

known as Membership of the College of Technologists. In the same year the pamphlet, 'Britain's Future and Technical Education' was issued to make industry aware of the facilities becoming available, and in 1959, the building programme needed to fulfil the expectations of the 1956 White Paper was agreed with the L.E.A.s. As a sequel to this White Paper, technical colleges were now organised into four main types:-

1. Local Colleges which took courses usually part-time to O.N.C. level.
2. Area Colleges which provided O.N. courses, some advanced part-time work and also some full-time and sandwich courses.
3. Regional Colleges which had the staff and equipment necessary to handle full-time and sandwich advanced work up to the standard of Diploma in Technology.
4. Colleges of Advanced Technology which were concerned chiefly with advanced work, mainly full-time and sandwich.

There were eight colleges, provisionally designated as C.A.T.s and it was hoped, later, to add one in the S.W. of England and the other in the N.E. To be considered of C.A.T. status,

the college had to provide a broad range and a substantial amount of advanced, post graduate work and research; staff standards and conditions should be similar to those of a University; the governing body must strongly represent local industry, universities, professional bodies and L.E.A.s,and have adequate libraries, reading rooms, staff rooms and hostel accommodation. (26) This promise of a C.A.T. in the N.E. caused great rivalry among the Technical Colleges of Rutherford, (Newcastle-upon-Tyne), Sunderland,and Constantine (Middlesbrough).

The defects in the provision of further education in England were emphasized by the Crowther Report of 1959. It said.."One of the starkest statistics in the whole of English Education is that only one out of every eight young people in the three years, 16 to 18, are still engaged in full-time education." (27) The Report also selected twelve characteristics of further education to which attention should be directed:-

1. Only a minority of industries have a standard pattern of apprenticeship schemes which involve day release and these are only for boys.
2. There is a wide range of ability in further education courses and there should be consistent provision for the training of technicians, operatives and craftsmen.
3. Because further education developed as "the handmaiden

of employment", day release is dependent on apprenticeship.

4. There is, however, no close connection between the organisation and nature of apprenticeship so that the boy is presented with two objectives.

5. Provision for the smooth transition from full-time school to part-time education is often lacking.

6. Many further education students are sons of foremen and skilled artisans, and a considerable number of them come from the Sixth Form.

7. Examinations are organised in stages and a student must pass all subjects of one stage before he proceeds to the next. This results in retardation.

8. Because of the different nature of girls' employment there is little day release for them.

9. Full-time students only comprise 5% of the total number who make use of major establishments in the course of a year.

10. Attendance of students in evening classes is irregular and many of them fail to continue their courses.

11. The growth of sandwich courses is a source for optimism.

12. Most of the staff in further education are part-time and include a majority of men. A large proportion of them have had no training in teaching. (28)

Three recommendations for further education given by the report were:-

a) There must be more integration between schools and further education.

b) The rate of failure should be reduced by allowing more time and the reliance on evening classes only should be ended.

c) The varied collection of plans for vocational education should be converted into a comprehensive and well-organised scheme of practical education.

Progress as usual was slow and necessitated the Government bringing out still yet another White Paper on January 5th.1961, called "Better Opportunities in Technical Education". This White Paper contained proposals for a major reconstruction of the system of courses for technicians, craftsmen and operatives (a category of worker defined by Crowther as "persons who carry out specific operations, involving the use of machinery and plant, which did not call for traditional craft skills") in the technical-colleges of England and Wales. Since half a million students were attending courses and a big increase in numbers was expected, in their own interests, and those of the nation as a whole, these young people had to be given the best possible opportunities for technical education and training. The changes were to have the following objects. First, they were intended to broaden the education received by the students and to

provide the maximum continuity between education at school and the technical college. Secondly, they would adapt the system more closely to the needs of industry and in particular, meet the urgent need to make more and better provision for technicians. Thirdly, they would increase the variety of course available to students according to their aptitudes and the careers they wished to follow . Fourthly, they would substantially reduce the wastage which occurred owing to the failure of so many students to complete their courses successfully. The chief proposals were:-

1) Students should start at a technical college immediately after leaving school. Preliminary courses in evening institutes should be discontinued.
2) More care should be taken in the selection of students for courses. Colleges should experiment with full-time induction courses and with tutorial methods.
3) The courses should include:
   a) National Certificate and Diploma courses for students aiming to become at least high grade technicians;
   b) Technician courses devised specifically for particular industries;
   c) Craft courses;
   d) Courses for operatives.

4) Ordinary National Certificate courses should last two instead of three years. The standards of entry should be raised.

5) There should be new courses of four or five years specially for technicians.

6) New general courses should be introduced, leading to either technician or Ordinary National Certificate and Diploma courses.

7) Craft courses should be modified in various ways.

8) Courses for operatives should be vigorously developed.

9) More time should be provided under day release schemes. No student should have to rely wholly on evening study.

10) Sandwich courses (especially for technicians) and block release courses should be increasingly developed. (29)

In Sunderland, the Momkwearmouth College of Further Education was opened the year after the publishing of the White Paper and attempted to carry out the proposals. The new general courses were to provide a diagnostic period for the students before attempting higher work and special attention would be given to grounding in mathematics and science, Also it was hoped to increase the numbers attending day release courses and end dependence upon evening classes.

The great revolution in Education awaited the end of

1963, for this marked a crisis in eduction that was reflected in the publishing of the Newsom Report, the Robbins Report and the proposals put before Parliament in November 1963, concerning Industrial Training.

The first of these, the Newsom Report, "Half our Future", dealt with the education of those average or less than average pupils who form half the population of our secondary schools and will thus form the major part of our industrial man power. This report affected further education indirectly since, if the principal recommendations of raising the school leaving age to 16, better school buildings and teaching facilities, including more generous provision for practical subjects, had been implemented fully, this would lead to much better prepared entrants to further education and thus to a raising of standards. These proposals were not accepted as enthusiastically as those of the Robbins Committee which had "to review the pattern of full-time higher education in Great Britain and in the light of national needs and resources, to advise Her Majesty's Government on what principles its long term development should be based, whether there should be any changes in that pattern, whether any new types of institution are desirable and whether any modifications should be made in

the present arrangements for planning and co-ordinating the development of the various types of institution". The enquiries to be carried out by the Robbins Committee and its proposals would affect the development of the Sunderland Technical College, the College of Art and the Training College. In a circular, dated 29th. June 1961, the Director of Education listed the main headings of the Robbins Committee's enquiries regarding the structure of the Town's Higher Education. For each type of institution these would be: "a) The form of government, including finance and other relations with Central and Local Government, with non-statutory bodies and with industry. b) Internal self-government, qualifications and conditions of service of the staff. c) The numbers, ages, country of origin and sex of students.. d) Admission policies. e) Length of courses, content of courses, nature of final examination and qualification awarded. f) Number of students qualifying. g) The amount and nature of research activity and its relation to that in other educational establishments and elsewhere. h) Physical conditions, e.g. Buildings available and the extent of residence. i) The machinery of Central and Local Government for co-ordinating the various forms of activity.

Some of the topics of discussion would be:-

What should be the future status of Colleges of Advanced Technology in relation to the Universities and Technical Colleges?

In what institutions should Teacher Training be provided and in what form of course?

Should the present Training Colleges provide some courses for those who do not intend to take up teaching?

Should all institutions provide a wide range of disciplines?

What should be the machinery for co-ordinating the work of various types of institutions?

What should be their relations with Government?"

From the wealth of recommendations and appendices of the Report which ran to six volumes, those of most concern to Sunderland's higher education were as follows:-

1) The Report proposed a grand expansion and re-organisation of higher education, with a massive development of existing institutions. From there being 216,000 students in full-time higher education, this should be increased to 390,000 by 1973-74 and by 1980-81 to 560,000.

2) By 1980, 30% (instead of the present 20%) of graduates should proceed to post-graduate work, and this work should include a high proportion of technological research.

3) C.A.T.s to be technological universities, awarding first

and higher degrees and financed by the Grants commission.

4) Two new post-graduate business schools to provide post-graduate courses in management.

5) Regional Colleges to have wider advanced courses- some to federate with other colleges and to become in time part of universities or universities in their own right - others to remain with L.E.A.s.

6) Area colleges to continue under L.E.A.s.

7) Hives council to be replaced by a National Council for Academic Awards covering the whole of Great Britain. This would award Honours and Pass degrees to students in regional and area colleges.

8) Short term measures included 10% more higher education places than are now planned for 1966/67 and the universities' capital building programme be increased.

9) Ministerial responsibility: New Minister of Arts and Science to be responsible for a new Grants Commission for Research Councils, and for other autonomous state supported activities. The Secretary of State for Scotland and the Minister of Education to be consulted (proposed joint consultative council) and the proposed council for National Academic Awards to be responsible to these three ministers. The Minister of Education to be in charge of

primary, secondary and further education and of the non-autonomous branches of higher education.

The Government was much quicker in accepting the recommendations of the Robbins Committee than those of Newsom. They approved the future status of the C.A.T.s and in Feb.1964, Mr.Quinton Hogg announced a considerable increase of grants to universities and an increase of building grants to universities. Also in 1964, an important event took place affecting the development of Regional Colleges in general and that of Sunderland in particular. Acting on a recommendation of the Robbins Committee on Higher Education, the Government set up the Council for National Academic Awards and empowered it, by Royal Charter, to award degrees and diplomas of equal merit to those offered by established Universities. The Council is composed of members drawn from Universities,from Further Education establishments outside the Universities, and from industry, commerce and Local Authorities. Its responsibilities are two-fold: one, to give detailed consideration to courses offered by Colleges, and the suitability of the Colleges themselves for work at degree level is delegated to two main Committees of the Council and to Subject Boards set up by them. The other responsibility is to maintain the standards of work required

for a degree, and this is achieved by the appointment of External Examiners, approved by the Council, who are associated with the College Examiners at appropriate stages of each course.

Courses leading to C.N.A.A. degrees are planned and administered by the College throughout, and there is considerable scope for innovation and experiment. With the rapid changes in technology, this can be an important factor in ensuring that a course meets up-to-date needs. The academic standards and overall content are safeguarded, however, and the successful student receives a degree which will stand comparison with the best that other institutions such as Universities provide.

Another hall-mark in the development of further education related to both the Newsom and Robbins Reports, which is having a profound affect upon the development of West Park and Monkwearmouth Colleges of Further Education, was the Industrial Training Act of April, 1964. In December 1962, the Government's White Paper on Industrial Training at all levels of industry and commerce through industrial training boards, was welcomed by the representatives of L.E.A.s and teachers. Its proposals were put before Parliament in Nov. 1963, and became the Industrial Training Act of 1964. This

Act gave the Minister of Labour powers to establish training boards to cover all activities of industry and commerce. The boards would include about five members representing employers, about five representing employees, and the Ministry of Labour, the Ministry of Education and the Scottish Education Department would appoint assessors. Educationists must also be members of each board and of the Central Training Council, six members of which would be appointed after consultation with the Minister of Education and the Secretary of State for Scotland. Each board had the function of seeing that the amount of training in its industry was satisfactory and would issue recommendations concerning the type and length of training for different occupations and the further education connected with it. The Minister of Labour was empowered to assist the formation of training boards and could issue grants up to £50 million. The Act also gave power to impose a levy upon employers to secure that adequate funds would be available to meet the training requirements of the industries. Grants would be made from the levies to employers satisfying the requirements of the boards. This training scheme therefore provides a working partnership between the education service and the employers and employees, and will provide more industrial training places for both works-based

and college-based students. It should help to meet the increased demand for technicians and craftsmen, and should help the educations of those who leave school at the minimum age.

In 1966, two more important events were planned for some technical colleges. Five, of which Sunderland was one, were chosen to establish Departments of Education whose prime purpose was to train teachers. Also the Government published "A Plan for Polytechnics and other Colleges" whereby Sunderland Technical College and Sunderland College of Art combined to form Sunderland Polytechnic.

Thus, the future of further education seems to be one of expansion and still further expansion, and it is likely to become one of the vital issues in the educational programmes of all the major political parties.

Chapter 9.

Sunderland Technical College. 1.

1908 - 1919.

Further and higher education in Sunderland has been predominantly based upon the Technical College, together with evening classes, held in various schools, whose courses were chiefly designed for a pre-technical college training and therefore the Technical College has dominated most forms of thought on Education in the Town.

On the 28th,May,1908, the Higher Education Sub-Committee chose Mr.Victor A.Mundella,M.A.(Cantab).B.Sc.(Dunelm), from a list of 49 applicants, to be the Principal of the Technical College, salary £500 per annum, and Superintendent of Evening Classes, salary £50 per annum. He was 41 years of age, Head of the Department of Physics and Electrical Engineering at the London Northern Polytechnic and a recognised teacher of Physics at London University. (1) At the time of his appointment, the College consisted of 13 laboratories of a specialist nature, fitted with machinery and apparatus, two lecture theatres for Physics and Chemistry three Drawing Offices accommodating 40,40 and 18 students

respectively, equipped with high desks and stools, three classrooms seating 24, 21 and 18 students, and an Examination Hall with a movable partition which could accommodate 140 students. The College was administered by a body of Governors, appointed annually by the Education Committee, and consisting of 9 members of the County Borough Council, 2 members of the Education Committee, 1 representative of the University of Durham, 1 from the County Council of Durham and 7 co-opted members representing the industrial and commercial interests of the town. There were 57 day students and 580 evening students taught by 5 Heads of Departments, 5 Assistants giving their whole time to the College,and 31 part-time teachers employed in teaching Evening Classes. (2) The five departments in which day time instruction was given were:- Mathematics and Mechanics; Physics and Electrical Engineering; Chemistry; Mechanical and Civil Engineering; and Languages and Commerce. Each of these departments had a Head and an Assistant. Evening Classes were held in these departments and also in Geology; Botany; Naval Architecture and Mining. It is surprising that, in a town priding itself as the'Place where Ships are born', and one of the chief coal producing and coal exporting towns in the world, there should not have been Departments in Mining and Naval Architecture. Students wishing to study

Naval Architecture could attend lectures held on Mondays, Wednesdays and Fridays between 8 a.m. and 9 a.m., Thursdays between 7 p.m. and 10 p.m. or make private arrangements with the lecturer, Mr.A.Moffoot. Mining classes were held only on Saturday afternoons. This may have been due to the reputation that the Mine owners were of a re-actionary nature and that shipbuilders were satisfied with "rule of thumb" methods. In the lists of early benefactors of the College, most support came from Engineering firms and little or none from Mineowners.

In 1908, the day classes served several purposes; firstly, they provided complete courses of instruction for students wishing to become engineers in any branch, mechanical, electrical and civil, or Works' chemists; secondly, courses were provided for suitable students wishing to graduate in Science at the University of London; and finally, certain classes of an occasional nature were held to meet special needs e.g. Chemistry and Physics for those going in for medicine and dentistry; or French or Technical German etc. The nature of the instruction given is amply illustrated by this extract on page 15 of the 1908 Prospectus:- "Students are instructed in the scientific principles underlying the industries in question; much of what they learn in the classes is capable of direct practical application; but no attempt

is made to teach them the technique of a manufacturing industry for this is best learned through actual practice under trade conditions." Students who had matriculated before entering college and who "have been apt pupils at school, finding little or no difficulty in book-work generally, should make it their aim to gain the degree of Bachelor of Science (Engineering) at the University of London..... being able to complete their studies for the degree in three years." For students not so gifted, the college offered courses lasting three years, leading to the Diploma of Associate of the College in Engineering, Electrical Engineering, Naval Architecture and Chemistry. The Diploma was awarded in two grades- Ordinary, and Honours, Honours Diplomas being awarded to students of exceptional capacity and attainments. Since the bulk of the work done in the College was done in the evenings, it is interesting to read the aims and objects of the evening classes given on page 15 of the 1908 Prospectus of the Evening Classes:- "The Evening Classes provide instruction suitable for persons that are engaged during the day in some manufacturing or commercial industry; they aim at instructing a student in the scientific principles underlying the industry in which he is engaged. These classes are supplementary to the students' work in the factory, workshop

or office, being designed to aid him to an understanding of that work and an intelligent interest in it, such as he could hardly attain otherwise. The student will find that much of what he learns in the classes is capable of immediate practical application in his daily work outside; but no attempt is made to teach him the handicraft of a trade or the routine of an office, for these are best learned through actual practice under trade conditions.....certain classes of an occasional character are held to meet special needs... such as pure science and in modern languages, and the classes in Latin and Greek". Successful students, after a course lasting four years were awarded Certificates in either the Ordinary or, for outstanding attainment, Honours grade. The subjects in which Certificates were awarded were-Mechanical Engineering, Electrical Engineering, Civil Engineering, Naval Architecture, Mining, Chemistry (Inorganic and Organic), Commerce, French and German. The courses were also considered to be sufficient, without any additional tuition, for students to pass examinations conducted by external bodies such as the Board of Education, the City and Guilds of London Institute, the London chamber of Commerce, the Society of Arts, the University of London etc. (3) Both the Diploma and the Certificate courses were much dependent on preparatory

work being done in evening classes at the Bede Collegiate School and Hudson Road School, where courses were held which prepared pupils for the entrance examination for the College. By 1908, little remained of the twenty two Science and Art centres which had operated in the town at various times as mentioned in Chapter 3. Private evening classes survived, organised by such bodies as the Y.M.C.A., the Co-operative Society and Hendon Church Institute, but they had given up the work of providing preparatory classes for the College, leaving this to the local authority evening classes mentioned above, which were organised by the Principal of the Technical College and paid for out of grants. The private classes were in subjects such as Co-operation, Citizenship, Industrial History, Book-keeping, dressmaking, Ambulance Work, Mathematics and Shorthand. (4) Few records of these classes remain, many being destroyed during World War 11, but generally speaking after 1908, the local authority provided more and more evening classes whilst the privately provided centres retired from the scene.

The College had earned for itself a high reputation. The Governors of Gordon College, Aberdeen, were recommended to visit it because it was "one of the finest for its size in the United Kingdom", (5) and an Inspector's report after

his visit in 1907 said "The equipment is generally satisfactory, and in some cases, very full....the teaching staff is adequate and well-qualified, the Heads of Department in particular having been chosen with great care. The instruction given is thoroughly good, that in Mathematics and Mechanics especially so". (6) The chief claim to fame that the Technical College could make was that it was the first college in England to introduce a student apprentice scheme based on the "sandwich course". This idea probably originated with Dr.Robert Gordon Bell,M.D.,F.R.C.S.,J.P., chairman of the Governors of the Technical College, who was intensely interested in the welfare of both this College and the Day Training College. He had made a study tour of Technical Colleges in Europe, and was particularly impressed by the sandwich courses at the Technical Hochschule, Charlottenburg. On his return, aided by Councillor Roche, with the enthusiastic support of Mr.J.H.Meek, manager of the Scotia Engineering Works, (later a co-opted member of the College Governors) and five participating firms, three of which were Marine Engineers, the scheme was launched in 1903. In 1908, it had grown to include twenty five participating firms, listed on page 75 of the 1908 Prospectus. The main points of the student-apprentice training scheme were as follows;- The boy first

had to have a satisfactory education, preferably a secondary education, followed by two years of apprenticeship during which time he attended evening classes. Satisfactory apprentices under the age of 18, chosen for the course now spent the next three or four years dividing their time between college and works. They attended College day classes as students during the six winter months(October to March) and returned to their work as apprentices in the engineering workshop or drawing office for the six summer months. The time spent in college was reckoned as part of their apprenticeship and the rate of advance of wages continued. Firms often paid the wages of the apprentices in full, but apprentices who were not paid, could apply for a Maintenance Scholarship to the Sunderland Higher Education Sub-Committee. Successful apprentices were expected to guarantee a minimum of two years' service with their firm after completion of training.

Two setbacks to the development of the College in 1908 were concerned with teacher training and affiliation to the University of Durham. The plans, to spend £10,000 on extensions to the Technical College for a Department of Education to train teachers, had to be shelved for sixty years. Instead of a department controlled by the Technical College, a separate Day Training College was formed with its own

Governors, Principal and Staff. As described in Chapter 6, the first Principal was Mr.G.Readdie,M.A.Edin., head of the Modern Languages and Commerce Department of the Technical College and his departure seriously affected the future of that department. Much more disappointing was the outcome of affiliation to the University of Durham. On many previous occasions, all approaches to secure affiliation to the University had failed whereas in Newcastle, the Durham College of Science had been well established. In 1907, commissioners met to arrange for the reconstitution of the Durham University, caused by the desire for more independence of the Newcastle branch of the University, founded in 1871, and now larger than its parent, founded in 1832. Representation was made to this body that provision should be made in the Bill for Sunderland to become a constituent college of the University.(7) The result, in a letter from the Senate of the University of Durham to the Corporation of Sunderland was disappointing but held out hope as can be seen from the following extract:- "The Committee are of the opinion that there is ample opportunity for the development of University teaching in Sunderland, and a prospect of it taking place in the near future, and that the technical college is well adapted to serve as a nucleus. At present, however, the college is not

in a position to undertake the curriculum the University requires in pure science as it offers no teaching in geology, zoology, or botany. The Committee is of opinion that the college would be competent to undertake the University curriculum in engineering and electrical engineering if the following extension of present resourses could be provided;-

" A more extensive physical laboratory, more fully provided for the teaching of branches of physics other than electricity"

" A separate lecturer at the head of the department of electrical engineering who should, by preference, be a practising electrical engineer."

" An extension of the laboratory accommodation and appliances for the teaching of electrical engineering."

" A more adequate engineering laboratory, provided with the necessary steam machinery".

I am further desired to inform you that it will give Senate sincere pleasure to hear from you upon the matter, should you see your way to extend the resources of the college to meet the requirements which the University regards as essential for University teaching in engineering and electrical engineering; or further so to extend the scope of the education carried on in your college as to cover the University curriculum in pure science, or in any of the other branches of applied science

recognised by the University as qualifying for degrees". (8)

The new Principal Mr.Mundella, seems to have been a man of tremendous drive, organising skill and with great capacity for work. This is illustrated by the changes brought about in the College and the re-organisation of the Evening classes during his first year. Information about the college during the year 1908 - 9 has been obtained from the Principal's Report to the Governors of the Technical College. (9) Administration changes had included the division of the Physics and Electrical Engineering into two departments, the Principal himself assuming the Headship of the Physics Department. The Languages and Commerce Department ceased to function as a full department and no-one was appointed in Mr.Readdie's place as its Head. A card index system had been established for keeping records of students, attendances, classes, and examination results. The educational work of the College had continued to improve as can be seen from extracts from H.M.I.Report issued in the summer of 1909. "The teaching of the various subjects has, during the past session, been excellent, and the students have attended with regularity, and have conscientiously worked at their home exercises".(10) The apprenticeship scheme was re-organised, raising the educational standards of the second, third and fourth

year courses, so that whilst a good student could obtain the Ordinary Diploma of Associate of the College after three years, the Honours Diploma was reserved for the more successful students after four years.

The Evening Classes were completely reorganised and grouped to prevent students taking only one subject. The classes were grouped together to form complete courses of instruction spread over three or four years, each course involving attendance at the College on three evenings a week. Certificates of Proficiency were awarded to students who had passed satisfactorily through a complete 'course of instruction' and Ordinary Certificates to those who had completed two years at the College, and an Honours Certificate to those who had completed three or four years. The classes in Languages were reorganised and doubled in order to afford better facilities for students studying for Matriculation, and Intermediate Arts Examinations of the University of London. The standards were expected to improve since the Principal had also organised preparatory lessons in French and English to be held in the evenings at the Bede Collegiate School. In fact, all Elementary Classes in Languages and other subjects were transferred to the Town's Evening Schools, so that the Grant from the Board of Education for the College Evening

Classes could remain at a high level. The improvement these changes had on the College Evening courses can be seen from the table included in the Report:-

Number of Evening Students	1909-10	1908-9
taking 1 subject	280	404
taking 2 subjects	106	130
taking 3 or more subjects	134	46
Total individual students	520	580
Average no. of hours per student per week	3.3	2.1

The Naval Architecture course was reorganised so that more time was devoted to each stage and a Class in Iron and Steel Shipbuilders' Work was established in coonection with the City and Guilds of London Institute. Courses of instruction were also introduced for the Building Trades.

The Principal also outlined his plans for future developments for the College. In this he was aided by a quotation from the H.M.I.'s report:- "The equipment is generally satisfactory and in some cases very full; but it is desirable that better provision should be made for practical instruction in Engineering and Heat Engines". In order to fulfil the requirements laid down by the University before affiliation could take place the Physics, Electrical Engineering and

Mechanical Engineering Departments would have to be extended and much equipment, especially steam machinery obtained. A Drawing Office and other rooms properly equipped were needed in order to establish a Department of Naval Architecture, controlled by an expert who would conduct both Day and Evening courses, such a Department being essential in a town like Sunderland. The Principal also wished to cater for the other primary industries of the area by securing the appointment of a full time teacher who would organise and select equipment for a Department of Mining and allied subjects. He also wished to extend the Building Trades' Evening classes by providing laboratories for them. The overcrowding was amply illustrated in the needs for a larger Botanical Laboratory, since the one in use could only accommodate ten students working at one time and this subject was taken by 140 Training College students, as well as by 60 Evening Class students. The needs of the College in 1909 for its future development can be seen from this extract at the end of the Report:- ..."The College rooms are at present fully used both in the day and in the evening, and an extension of the building is very necessary and urgent, not only to enable the present curriculum to be carried on efficiently, but also to make provision for the natural growth of the Departments and the further developments outlined in the above paragraphs....A further

expenditure on equipment must also be provided for at the same time as the extension of the building, so that there may be no delay in making full use of the additional rooms provided". (11) The Report ended by appealing to the Association for the Endowment of a University College in Sunderland, organised by Dr.R.Gordon Bell, to keep the public informed of the needs of the College. To collect funds for the equipment, extensions and better endowment of the College for new Chairs and Scholarships.

Mr.Mundella also made a great impact as Superintendent of the Evening Schools of the Borough by introducing, in 1909 (Sept) the course system, which had been successfully operated in the industrial areas of Lancashire, Cheshire and the West Riding of Yorkshire.The study of single science and art subjects and the consequent hunt after numerous certificates, prizes and medals was now discouraged by the Board of Education. It was now making great efforts to organise a course system of instruction in Evening Schools, with a uniformity in the nomenclature and curricula of the Higher courses in large areas. Principal Branford and Dr.R.G.Bell, who had marked the examination papers for the selection of student apprentices, were far from satisfied with the educational standards attained in the local evening classes, as can be seen from their comments in the Sunderland Echo, 1st.Oct. 1903:-....

"Bad spelling and handwriting....no capacity whatever to apply their arithmetic, geometry and algebra to concrete numerical problems.... much bad work in the Science Paper". Principal Mundella continued this criticism and complained of two great defects found in students entering evening classes. " 1) The preliminary training is inadequate to enable the student to profit fully by the Higher instruction in technical and commercial subjects and (2) the inability of a student to arrange his continued study of a special subject so that he acquires at the same time the necessary knowledge of allied subjects". (12) To overcome these defects, Mr. Mundella organised Courses of Instruction, whereby the whole of a students time at the evening school was fixed at a definite number of hours per week occupied in study, every student entering, payed and attended the whole course and was moved each year, from one year of the course to the next higher year of the course, on passing the requisite local examinations, held at the close of each winter session. Thus the student received a continuous and advancing instruction in all necessary subjects. The two main courses of instruction in Sunderland's Evening Schools were technical and commercial. Each course was arranged for four consecutive years. The first two years in each, was a preliminary course suited to the needs of all technical or commercial students respectively

and was styled the preliminary technical course. The third and fourth years of each course were specialised to meet the needs of those students entering particular branches of industry or commerce, namely engineering, shipbuilding, electrical engineering, building trades, book-keeping, shipping clerks, etc. Students leaving the elementary school at the age of 14, usually entered the first year course. Those students with higher standards of educational ability were allowed to begin at later stages of the course, ability not age being the determining factor. Students were expected to attend classes three nights a week, each night consisting of at least two hours instruction, and also do homework and private study. Each school had an organising master who was one of the teachers and his function was to ensure that every student found his way into the appropriate course, made his full attendance and progress from year to year. He also had to devise and superintend the working of a suitable home work scheme, generally attend to all administrative forms and cope with returns required by the Education Authority. Students had to enter for a full course and the fee for a full course was always charged. In special cases, a single subject could be taken but the fee charged was greater than that for a complete course. (13) In a letter to the Sunderland Echo, dated 6th.Sept. 1910, Mr.Mundella wrote..."The so-

called 'educational ladder' is in existence, and is being more and more used. Let every Sunderland boy see to it that he secures all the advantages so freely offered to him.... Thus, the poorest boy has every opportunity of securing a thorough training on the theoretical side, which will qualify him for the highest position in the engineering profession.. or commercial career".

The reults of this reorganisation evidently pleased Mr.Mundella, because in his report to the Governors, Dec.1910, he wrote..."Great improvement was shown last session... thus proving the advantage of the course system of instrudtion. This system undoubtedly leads to fewer students in the early years after its introduction, but this decrease in numbers should be only temporary". He went on to say..."The syllabuses of instruction have been so drawn up that the work is co-ordinated with that of the advanced technical classes held in the College.This is bound to re-act favourably on the College Classes in future sessions, as the course system of instruction not only produces better prepared students, but also makes them more eager to take full advantage of the advanced technical training". (14) He also was pleased with the improved standard of the applicants for student apprentice scholarships as can be seen from...."The success of the College depends mainly upon the efficiency of the elementary and

secondary education in the town, as without well prepared students, the College can make little headway in promoting more advanced studies. In this connexion, I should like to record here, the success of the Bede Collegiate pupils in securing scholarships under the Apprentice-Studentship Scheme, and also that a higher educational standard was shown by candidates in the recent examination than in previous years",(15)

As a result of the reorganisation, courses held both at the College and in the Evening schools continued to improve academically. The Prospectus of 1911-12 contains the Principal's report for the year 1909-10 and he wrote of ... "The standard of education reached by the picked band of Engineering Apprentices in the Day Engineering courses is equal and in some respects is superior to that of most Colleges in this country and proof of this is seen in the list of successes on page 11". For the first time in the College's history, the Engineering Course had an outside examiner to act as Assessor. This was Professor A.E.Mellanby, D.Sc.etc. of the Glasgow and West of Scotland Technical College, selected because of his high position, practical experience gained in Europe and America, and experienced as Examiner in Engineering subjects for the University of London. After a careful inspection of the students at work, their

note-books and examination papers, he gave a long, detailed, critical report in which he was delighted with the work but unhappy about the equipment. He had such critisisms as..."I consider, however, that the laboratories are much too small for the work that has to be done in them. The amount of plant in the College should have, at least, three times as much floor space as at present available.....I was greatly surprised to find that there was no experimental steam plant in the laboratories....I was particularly pleased with the high standard shown in the Mathematics and Mechanics paper... so far as can be judged from the examination papers,I think that the teaching is very sound and efficient, and that the standard reached is equal to that of most of our University Colleges". (16)

The Principal's report to the Governors on the work done for the session 1910-11 dwells on the steady progress, not marked by any special development. The External Examiner again wrote of the high standard of work and sound efficient teaching and said..."What I consider one of the most pleasing features in connection with the work you are doing,is the close relationship that exists between the College and the local employers. If such a relationship existed in all of our Engineering Colleges there would be no need for the almost

endless series of discussions that now take place upon the 'Best Training for Engineers'..." signed A.L.Mellanby. (17)

In his report, the Principal was very pleased with the work done in the elementary classes held in the Town's Evening Schools. The Course System was proving a success and increasing the body of students well prepared and anxious to take advantage of the Advanced technical courses in the College. He considered it very desirable that a complete system of Evening Class instruction had developed, both technical and commercial, linked at one end with the elementary schools and at the other end, with the advanced evening technical work of the College and the higher commercial evening classes held in the Bede School buildings. New regulations were issued in 1910 by the Board of Education whereby it was possible to give a Grouped Course Certificate which was evidence of a certain standard of knowledge in specified subjects. Such Grouped Course Certificates were of two stages - Senior and Advanced, and were awarded to successful candidates at the close of the fifth and seventh year of the course of instruction respectively and under certain conditions were endorsed by the Board of Education. The evening classes under the control of the Evening Schools' Sub-Committee were increased by handing over

elementary classes in Botany, Mining, French, German, Latin, Spanish, Italian and English from the College, thus creating a loss of at least 150 students to the College. The Principal advocated the establishment of a Junior Day Technical School for boys leaving the elementary schools at 14, to which they would go for two years full time in experimental mathematics, elementary science, drawing, mechanics and English before being apprenticed at 16. After two years in shops, and in attendance at evening classes they would then be in a position to take advantage of the facilities for advanced work in the College as already described.

The very high standard of the work done in the College is amply illustrated by the report of External Examiners for 1912, Professor A.L.Mellanby and Dr.J.T.Morrow. Since this is a typical example of all the reports made on the College by External Examiners, during this period, it is included as being representative of all of them. .... "I have the honour to submit my report as External Examiner upon the recent examinations held at the Sunderland Technical College for the Diploma in Engineering.... As in previous years, I was able to gather from the books and drawings presented, a good idea of the whole of the work in your 'Four Year Course', both on the lecture and the laboratory sides. In former Reports, I have

been able to express my high appreciation of the quality of the work done in your College, and I can only now say that my latest visit confirmed my previously expressed opinions. The large amount done by the students in the laboratory and drawing classes is a gratifyimg proof that they are keenly interested in these branches of their studies, and I can safely state that the standard of this work is as high as that done in many of our University Colleges.

Laboratory and Equipment....I was pleased to learn that definite arrangements have now been made to increase the laboratory floor space. At present, it is in a very congested state.....I notice that you are still without steam engine and boiler experimental plant and would again draw attention to the necessity of such laboratory equipment. Since my visit to Sunderland, I have seen the laboratories of many other colleges and have been struck with the continuous additions most of them are making to their laboratories. In several of them the standard of the day work is far below that of your College and it seems unfortunate that Sunderland should be the only College of any position in Great Britain without a well equipped steam laboratory. It is quite certain that if such equipment were obtained, the students and ultimately the industries of the district, would greatly benefit.

Written Examination..... Seven students presented themselves for the Diploma in Mechanical Engineering and one for the Diploma in Electrical Engineering. I have to remark again upon the high standard of the papers in Mathematics and Mechanics. As in previous years,I select these subjects because it is the custom in some Colleges to give a Degree or Diploma with a lower standard in them than your men have reached.

I have again pleasure in stating that, so far as I can judge, the teaching in all subjects is efficient, and that the standard is of a very high order.

signed,
A.L.Mellanby, D.Sc.
Professor of Mechanical Engineering. (18)

Thus it can be seen that although the educational standards achieved by the College were maintained and improved, the equipment and accommodation were not in step. This was emphasized in Jan.1912, when five of His Majesty's Inspectors visited the College and conferred with the Governors with respect to the inadequacy of the equipment in Electrical Engineering and Physics, to the smallness of the respective laboratories, including that for Botany, and also to the general lack of classroom and other accommodation. Very brief extracts are given below from the official report of the

Board of Education received in October, 1912;- "The present equipment of the Mechanical Engineering Laboratory is far too small for an educational institution doing such work as is now being carried on in Sunderland. The entire absence of a steam plant, and of any machinery for experiments in Hydraulics, is greatly to be deplored, and the College Authorities are strongly urged to remedy this defect in the equipment at the earliest possible date"... In Electrical Engineering the..."equipment provides quite inadequate opportunities for the students to familiarise themselves with the behaviour and handling of even the simpler forms of electrical machinery..... From what has been said it is apparent that, though in nearly every instance the teaching is of a satisfactory or high standard, the instruction is in many cases hampered by the want of adequate laboratory accommodation and equipment. It will be impossible to carry out the courses of instruction in an efficient and satisfactory manner unless considerable additions are made to the laboratory accommodation and to the machines necessary to enable students to carry out experimental enquiries and tests in the subjects which they are studying. It is necessary to repeat and to insist most strongly that, until better provision is made, the work cannot attain such a standard of excellence as is to be

expected from a College of this kind or from such a highly qualified staff of teachers".(19) Moreover, in a letter from the Board of Education, approving a scheme for the official endorsement of certificates to be granted to successful Course Students, the Board added.. "they cannot regard the equipment of the College for the purposes of the Courses as being thoroughly satisfactory, and hope that the present deficiencies will be fully remedied at an early date. The approval of the scheme must for the present be regarded as provisional only".

As a result of this report, a Sub-Committee of the Governors was appointed in October,1912, with authority to call in the services of Mr.G.T.Brown, the author of the first design for the College Extension, with a view to an amended scheme being prepared, so as to provide such accommodation only as would be necessary to house the new equipment and to provide the required additional drawing rooms and class rooms. A special Sub-Committee, including Mr.A.E.Doxford and Mr.Alfred Harrison, was formed in June,1913 to consider the details of the engineering equipment needed. A large number of meetings of both committees were held, during which the proposed extension of the building and the equipment was subjected to detailed criticism. In vol.8 of

the Higher Education Sub-Committee Minute Book, ten meetings concerned with these topics are recorded. Finally, a detailed report on the whole matter was drawn up for presentation to the Governors at their meeting on March 26th.1914. The main points contained in that report are summarised as follows:- ....Building extensions costing £11,000 would provide additional laboratories for Engineering, Mathematics, Mechanics and Botany, and also three drawing rooms, two classrooms and one lecture theatre for the Engineering and Physics Departments. The proposed extensions also included accommodation for a small library, a students' common room and, in the roof, a large room suitable for the classes in Practical Laying Off and Platers' Work, (which were then conducted in the Chester Road Elementary School.)

The summary for the cost of the equipment for each department concerned was:-

Engineering	£ 2,561
Electrical Engineering	£ 1,850
Physics	£ 1,000
Building and Botany	£ 150
Contingencies	£ 439
Total	£ 6,600

The report also emphasized the importance of planning for the future needs as well as the present, because of the large number of students attending the Evening Schools and preparing to enter the College in two or three years time. The effects of the Grouped Course System, introduced in 1909, had resulted in Evening Class students coming up to the College better prepared and of more uniform quality and thus, the work in the College was consequently being developed on more advanced lines. Hence lack of necessary equipment, although serious now, would be disastrous in the future. The future establishment of a Junior Day Technical School for boys from 14 to 16 years of age, was also considered to be an argument for the improving of equipment and buildings.

After due consideration, at their meeting on the 26th. March 1914, the Governors resolved that the plans for extensions to the buildings and for additional equipment for the Technical College be passed to the Higher Education Sub-Committee with a recommendation that the Scheme be approved. Before the Scheme could pass through the appropriate channels of Higher Education Sub-Committee to the Full Education Committee and thence to the Council meetings, the 1914 War intervened and all developments were held up until after 1919.

Plans for the establishment of a Mining Department were

also prevented by the War. In May, 1912, Inspectors and the Principal had reported that the part time classes held in Mining on a Saturday afternoon were not entirely satisfactory. The Coal Mines Act had caused a revision of the examinations held by the Home Office for Colliery Managers' Certificates and in place of a few special subjects, a more generous, scientific course was now required. This course required some preparatory courses in the principles of elementary mining which would be taken at centres outside the College. Students passing this preparatory course could attend the Technical College for a course split up into Mining Geology, General Principles of Mining, Colliery Ventilation and Colliery Engineering. These classes would extend over two or four complete sessions and would qualify students to take the Deputies, Colliery Under Managers' and Managers' Examinations set by the Home Office. To make this type of course a success, a suitably qualified full time lecturer was needed to plan a course and get appropriate equipment. Lectures were going to be held on Saturdays with duplicate evening lectures.

Much useful information about the College between Sept.1908 and Jan.1915 can be obtained from the Principal's Report in 1915, in which he summarises previous reports and attempts to give a broad survey (20) A consideration of the

number of students involved, grants given etc. are useful for comparison with present day conditions of post-Robbins.

Day Engineering Students

Session	No.of Students in each Year of Course					Board of Educ. Grant.
	1st.	2nd.	3rd.	4th.	Total	£
1908-09	11	24	13	9	57	436
1909-10	19	12	15	10	56	448
1910-11	16	15	10	9	50	391
1911-12	11	16	14	8	49	396
1912-13	12	11	12	10	45	346
1913-14	10	12	8	9	39	314
1914-15	15	9	10	6	40 +11 enlisted	

A table also gave the previous education of the day students either a) from Bede Collegiate School, b) those from other secondary schools, and c) those from elementary schools. Boys from the secondary schools had usually gone to the Senior Courses held in the Town's Evening Schools for one or two years and those from the elementary schools had attended for four years, including two in the junior courses.

Session.....	1908	1909	1910	1911	1912	1913	1914	Total
Bede Coll.	6	7	7	6	4	3	3	36
Other Seds.	7	8	6	3	4	5	5	38
Elementary.	3	4	4	3	4	2	8	28
	16	19	17	12	12	10	16	102

This shows a falling off of boys from the Bede School and an increase, especially in 1914, of boys from the elementary schools. Of the 102 students passing through the College, the Principal listed their occupations and all were in positions of authority and paid high salaries. The fourth year of the 1913-1914 session contained a particularly brilliant set of students, seven out of the nine gaining the Honours Diploma, three the London B.Sc. in Engineering, one with first class honours. Other students are mentioned for winning various important scholarships. Much of the work of the College was done in the evenings as a list of Evening Classes shows. The number of evening students remained fairly constant, the drop in 1909-11 being due to elementary classes being transferred to evening classes in the town. The number of classes attended by each student can be seen to increase and the better attendance figures show the effect of the Grouped Course System.

Evening Classes

Session	To.No.of students	Av,Class entries per student.	Av.Student hrs. per student	Total Student hours	Board Grant. £
1906-07	460	1.5	40.8	18,784	502
1907-08	530	1.4	43.5	23,073	557
1908-09	580	1.5	49.6	28,822	725
1909-10	532	1.8	61.0	32,436	854
1910-11	456	1.8	64.4	29,352	751
1911-12	435	1.6	64.5	25.100	672
1912-13	403	2.1	74.0	32,242	905
1913-14	436	2.2	83.0	36,041	

The war of 1914-18 had the same harmful effect on the expansion of the Technical College as it had on the building of the new premises for the Day Training College. Staff and students were called up and at the meeting of the Governors on Oct.19th.1915, the Principal outlined the war-time plans for the College. The Day Training College had to go on paying £105 rent for the use they made of the Technical College's rooms and laboratories but had to provide their own science teachers. The time tables for the Day courses were remodelled so as to concentrate the work of each Department on one or two days. The services of the 11 Day Lecturers would now be available for evening classes, rendering unnecessary the re-appointment of most of the part-time lecturers. Five Heads of Departments and six full-time

lecturers now served the College. In Sept.1915, classes were established to train munition workers for the Armstrong Whitworth factories and courses in Commercial Arithmetic, book-keeping, shorthand, Office routine, and typing were also provided to train women to replace men who had been called up from office and secretarial positions. A fee of £1 was charged per pupil, and typewriters were hired at a cost of 3/6 per week. On Dec.14th.1915, a letter was received from the Board of Education who...."were of the opinion that the cost of providing short whole time courses of training for women required to replace men withdrawn for service in the military forces, should not, in present circumstances, be charged upon public funds. Courses of training should be self-supporting by charging fees to the pupils (payment could be deferred until they were wage earning) or employers or both".(21)

On Nov.20th.1917, a request was received from the Disablement Sub-committee of the local Naval and Military War Pensions, to consider providing facilities for training disabled sailors and soldiers, particularly with a view to the establishment of Trade Courses. This was deferred to a later meeting, forwarded to the Education Higher Sub-Committee, thence to the full Education Committee and crops

up on the agendas in 1919 and 1920, without ever a decision being made or anyone trained. A good example of using the committee system to avoid making decisions.

Thus, by 1919, although the Technical College had achieved high standards of academic attainment, as can be seen from lists of successes and Examiners' Reports, it had developed little from 1908. The number of Day students, Evening students, Departments, and full-time Staff was substantially the same and the work done, little different from when the College was opened in 1901. It still was a small "Whiskey Money" college, serving the needs of Sunderland and a small, contiguous area, chiefly in the fields of engineering where its main claim to fame, the Student Apprenticeship Scheme, was developed. When considering the importance of shipbuilding, described in Chapter 2 and the coal industry, described in Chapter 1, the meagre provision for these industries by the College seems a terrible waste of opportunity. However, the period between the Wars, described in the next chapter will see most of these faults remedied.

CHAPTER 10

SUNDERLAND TECHNICAL COLLEGE (2)

(1919 - 1939)

In the period between the Wars, as can be seen from Chapters 1 and 2, Sunderland was badly hit by the depression, since she was so dependent on the heavy industries of coal mining, coal exporting, ship building and marine engineering. In spite of this, all forms of higher education, the School of Art, the Teacher Training College and the Technical College expanded and were provided with additional accommodation. The most important development took place with regard to the Technical College and the hopes of its founders were realised when it became a University College in 1930. The decade after the ending of the War is therefore chiefly concerned with attempts to secure affiliation to the University of Durham and the development of the Pharmacy Department which is now one of the biggest in the country.

Before the War ended, the Board of Education circularised Local Authorities with a draft of Proposed Revised Regulations for the development of Further Education. This draft was presented to L.E.A.s not as a cut and dried scheme, but for their consideration and their views as to improvements. The

guiding principle of these Regulations and the Sunderland Authorities interpretation of them according to the Borough's needs for Further Education after the War, were issued in a booklet (1) The guiding principles of the regulations were:-

1. The L.E.A. was the body responsible for formulating the "Plan" for a complete and systematic scheme of further education, adapted to local, particularly industrial needs, and offering to every student facilities for a graduated and progressive course of instruction suited to his or her requirements.
2. The recognition of the distinctive status and position of the Technical College under the new title of Local College.
3. The need of securing the interest of employers and work people in technical instruction.
4. The need for developing the higher technical work and research done in the Technical or Local College.
5. The importance of providing facilities for disinterested studies making for wise living and good citizenship.

Under these Regulations the types of Institutions were to be 1) Local College. 2) Continuation Centres. 3) Junior Technical Schools. 4) Schools of Art. 5) Special Centres for

Advanced Study. Courses of study were divided into Full-time courses and Part-time courses. Full-time courses were sub-divided into Junior, for boys or girls leaving Elementary School at 13 or 14, Senior, for those who had attended a Secondary School up to 15 or 16, and Advanced, for those who had attended a Secondary School up to 17 or 18, or who had been in regular employment with concurrent attendance at Senior or Advanced part-time courses. The part-time courses were subdividedinto Preparatory...repetition of elementary instruction, Junior...for boys and girls leaving Elementary School at 14, Senior...for those who had passed through Junior Courses or who had left Secondary or Junior Technical Schools at 15 or 16, Advanced...for older students of University standards. Each Course of Instruction was to be one of the following types:-

1. Vocational

   i. Industrial ii. Commercial iii. Rural iv. Artistic

2. General

3. Domestic

Over leaf is shown in comparative columns the courses of instruction required under the Regulations and the courses held at the Technical College.

Full-Time Courses

Required	Provided
1. Senior Courses	1. Senior Courses
a. Technical	a. None
b. Commercial	b. None
c. Domestic	c. None
2. Advanced Courses	2. Advanced Courses
a. Technical	a. Mechanical and Electrical Engineering only.
b. Commercial	b. None

Part-Time Courses

1. Senior Courses	1. Senior Courses
a. Technical	a. Technical Mechanical Engineering Electrical Engineering Building Trades Ship Building Chemistry Inter. Science
b. Commercial (2 years)	b. Held at Bede School
c. Domestic (2 years)	c. None
2. Advanced Courses	2. Advanced Courses
a. Technical	a. Mechanical Engineering Electrical Engineering Building Ship Building
b. Commercial (2 years)	b. None

Thus it can be seen that in 1917 Sunderland was provided with a good scheme of part-time Evening Courses, still capable of much improvement, but there existed a serious gap between the Elementary School and Advanced Full-time Day Technical and Scientific Courses, and no provision had been made for any Full-time Day Courses in Commercial or Domestic Work. The recommendations of the Education Committee were :-

1. The Governors of the Technical College had to report as to the extension of buildings, additional equipment and the organisation of staff required to meet adequately the demands for Higher Technical Instruction, providing for Senior Full-time Day Technical Courses and the extension of Buildings and Equipment to secure affiliation to the University of Durham.
2. That Junior Day Technical Schools (Industrial) be established for boys, aged 13-16, for apprentices to the Engineering, Ship Building, Building Trades and Artistic Crafts.
3. That a Commercial School be established near to the College to provide Full-time Day Courses in Commercial Subjects, with Junior Courses for boys and girls leaving Elementary School at 13 and Senior Courses for older boys and girls leaving the Secondary Schools at 15 or 16.

4. That a School of Domestic Economy be established near to the College providing full-time day courses in Domestic Economics for older girls leaving Secondary Schools at about 15-16 years of age and special classes for women in late afternoons and early evenings.

5. That co-operation with neighbouring Education Authorities be encouraged, to secure recognition of the Local College as the chief centre of Higher Technical and Commercial Education in the contiguous area of the County.

All of these plans were included in the very ambitious schemes for the development of all forms of education, encouraged and stimulated by the passing of Fisher's Education Act, 1918. They are fully described in an article in the Sunderland Echo dated 20th December, 1920 and were going to cost approximately £713,700 of which £136,000 was for the Technical College, £20,000 for the new School of Art and £19,500 for buildings for the Day Training College. The reaction to these plans in the Town was generally favourable but as the slump increased, shipbuilding almost ceased, and letters appeared in the local papers either suggesting the pruning of the scheme or even that it should be scrapped, for it seemed to be an ideal and not for a town recovering from the War.

Fortunately, the members of Sunderland's Education Bodies,

although not ignoring public opinion, seem little deterred by it, when pursuing some of their ambitious schemes.

In 1919, a Junior Technical School was established in an old building in Villiers Street and it was pointed out to the Board that the Authority had not in mind the provision of a Trades School with a two year's course but a type of school which would prove a "feeder" to the day classes at the Technical College. (2) Therefore, the School provided a three year's course of pre-apprenticeship training for boys between the ages of 13 and 16. The Curriculum provided for the continuance of their general education but special attention was paid to such subjects as Mathematics, Mechanics, Practical Geometry, Technical Drawing, Elementary Science and Manual Training in Wood and Metal. Practical work was carried on in laboratories and periodic visits were made to suitable works to familiarise the boys with the operations conducted therein. Although the school had its own headmaster, the first being Mr. Edward Warriner, it came under the control of the Principal of the Technical College and took its place alongside most forms of further education in Sunderland, preparing students for the advanced work of the College. The School eventually had nine forms of 28 boys, with an intake every term. Its worth was recognised by the Engineering and Shipbuilding employers on the North-east coast, because they gave preference in the

selection of apprentices to boys from the school and this was of great importance considering the high rate of unemployment prevailing. (3)

Since the most important developments between 1920 and 1930 concerned the provision of buildings, equipment and staff to secure affiliation to the University of Durham, and the growth of the Department of Pharmacy they will be dealt with separately.

By 1921, few of the conditions required to ensure affiliation to the University had been satisfied. The Physics Laboratory had been improved for the teaching of Heat, Light, Sound and General Physics up to the standard of the Final Degree Examination in Science and a separate head had been appointed to the Department of Electrical Engineering since 1909, but the provision of extra laboratory accommodation and equipment had been postponed in 1914. In view of both the importance of securing affiliation quickly and the enforced ecomomy after the War, it was decided to ask the Senate to appoint a Preliminary Committee of Enquiry, to advise the Governors as to how far the present circumstances of the College, complied with the requirements of the Act. The advice was received on the 6th December, 1921 and contained a detailed report (4) of each department and suggestions for improvements. The main points were :

1a. All salaries should be put on a scale such as suggested

by the University Teachers' Association.

b. Additional Staff should be provided for Evening Classes so that the existing staff suitably expanded, would be entirely free for University teaching.

2. Additional buildings for Mechanical and Civil Engineering must be provided and were a 'sine qua non' before affiliation could be recommended. The existing buildings would suffice at the moment, if the proposed adaptions for Electrical Engineering were carried out.

3. A considerable sum, say £10,000 should be spent on additional plant for Electrical Engineering and an equivalent sum for Mechanical Engineering new plant.

In the light of this advice, permission was received from the Ministry of Health (5) to borrow £3,030 to purchase the site adjoining the College in Vine Place for extensions. The necessary excavations and building of retaining walls were completed in 1922 under the Unemployment Scheme; and the cost of this work £2,749 was met out of a loan in 1923 to be repaid in 30 years. Plans were drawn up to build a new Engineering Laboratory, a boiler house with chimney, a new Electrical Engineering Laboratory and additional accommodation for Physics at a cost of £7,500, together with additional equipment costing £12,500 which had been approved by a special committee. On 12th December, 1922 a deputation waited upon Senate to ask whether the above scheme, if it were carried out, would satisfy

the requirements of the Act. The reply of Senate was to the following effect:-

"The Senate is prepared to appoint the Committee of Enquiry (see Statute 115) upon formal application being made to the University for the affiliation of the College. This Committee's enquiries may be extended over a considerable period of time by acting in a consultative capacity with the Governors of the College during the progress of the building and the provision of the equipment. On completion of the work, the Committee would report to Senate that the Statutory conditions had been complied with and the Chancellor would forthwith declare the College to be affiliated to the University in the faculty of Science.

Thereupon the day students of the College would be entitled to be admitted as candidates for degrees in engineering and electrical engineering of the University of Durham without being required to attend lectures or instruction other than the teaching provided by the College, and the College would be entitled to nominate two representatives to serve on Senate." (6)

Application was then made to the Board for financial assistance, the reply T98014A/3 dated 3rd November, 1924, although considering the scheme a most promising line of development suggested that the £20,000 be obtained from

voluntary subscriptions. After more correspondence (7) on the 17th February, 1925, letter T98014A/8 approved the plans subject to the Ministry of Health's approval and on the 17th March 1925 formal application was made to the Senate. The premises and plans were then inspected but were found to be lagging behind the requirements now needed for a University College. At a joint meeting held on the 4th November, 1925 between the Governors and the Senate Committee nine points of difficulty were raised. The reply to these nine points, concerning the area and lay-out of the proposed new laboratories; provision of still further laboratory accommodation and extra staff, the new courses which were now needed (e.g. on Fuel and Metallurgy) and the extra requirements still needed if Honours students were going to be taught is to be found in a booklet of six pages.(8) This reply satisfied the Senate who forwarded a letter on the 12th February, 1926 stating "the replies were satisfactory and if the plans originally put forward by the College with the additions as regards staff and apparatus, subsequently agreed to by them are properly carried out, we consider that the requirements of Statute 115 will then have been carried out .....formal application for affiliation should be made." Building the extensions, inspecting them and making formal application took a further four years, but in 1930, it was possible, after a delay of 22 years to implement the conditions laid down by the

1908 Act and the College was affiliated to the University in the Faculty of Applied Science. On the 20th January, 1930 Alderman Stephen M. Swan, Chairman of the Education Committee and the Principal, Mr. F.A.T.Mundella were nominated to be the first to serve on the Senate of the University of Durham, ten lecturers belonging to the Mathematics, Engineering and Electrical Engineering Departments were accorded the status of Recognised Teachers in the University and ten students were matriculated in the University. (In 1969 there were over 300 reading for degrees in Applied Science.)

The year 1930 was important in the history of the College for in that year the Mining Department was founded and the Pharmacy Department was recognised by London University for the preparation of students for the London B. Pharm. The progress of these departments was far from smooth but compared with other forms of higher education they can be regarded as highly successful. The 1921-1922 Day Prospectus announced a course, lasting two years, in Pharmaceutical Chemistry, Botany and Physics, Materia Medica and Practical Pharmacy for students preparing to take the Part 1 of the Qualifying Examination of the Pharmaceutical Society of Great Britain. During the 1921-1922 session, 20 of the students were ex-Service men who had received preferential treatment on application and the fee was thirty guineas. Also on the 19th September, 1922 negotiations began with the Pharmaceutical Society with reference to the

College being recognised to take the Part II of the Qualifying Examination. On the 14th December, 1925 a request was made to the Pharmaceutical Society of Great Britain for recognition of the College as a centre for the Pharmaceutical Chemists' Qualifying Examination and to the University of London for the recognition of the College for the External Degree of Bachelor of Pharmacy. Both requests were dealt with by the University of London and the reply was a letter on 2nd February, 1926 from the University asking the Authority to submit a statement as to:-

1. Ownership of the Institution and Governing Body.
2. Finance, including a scale of salaries.
3. Premises and equipment available for the teaching of Pharmacy.
4. Teaching Staff - names and qualifications.
5. Number of students.
   a) At present receiving instruction in Pharmacy.
   b) Probably to be expected in the future.
6. The area served by the Institution and its population.
7. Curriculum and Time-table for courses in Pharmacy.
8. Any other points bearing upon the application (9)

After an inspection by representatives of the University of London, the Principal reported to the Governors (10) that the decision of whether to recognise the College for the purpose of giving courses for the B. Pharm. was deferred until after

the proposed extensions were carried out.

It was soon evident that the additional accommodation to enable the College to be affiliated to the University of Durham was insufficient, if the College was to develop along lines other than that of Engineering. The student population was increasing each year, and in 1920 full-time day students numbered 96 and part-time students 722. In 1921 and 1922, Departments (not with recognised Heads of Department) of Pharmacy and Naval Architecture joined the Departments of Chemistry, Mathematics, Electrical, Mechanical and Civil Engineering leading to a great pressure on space. Also it was considered necessary to make more provision for the Mining Industry. Therefore, plans which had been drawn up were adopted in June 1925 to extend the East and West Wing and to build on top of the engineering block. In this extension it was proposed to accommodate :-

a) The Naval Architecture Drawing Office and Private Room.

b) A Practical Laying Off Loft in the Roof.

c) A Mining Science Laboratory and Lecture Room.

d) A small laboratory for Mining Geology.

e) Several classrooms for the use of the Naval Architecture and Mining Departments.

f) A Botany and Materia Medica Laboratory.

g) A women's Common Room.

Since the question of finance, always important, was vital

in those days, much help was sought to make these expansions possible. The total cost of the extensions was about £11,000. The cost of (a) and (b) together with the equipment needed for the Naval Architecture Department was about £5,260 and would be met from Sir Robert Bartram's gift. The cost of the building allotted to the Mining Department was £3,795 and this together with the necessary equipment would come, it was hoped from the Miners' Welfare Fund Committee. This Fund was derived from the sum, equal to one penny a ton of the output of each mine and was allocated for mining education in County Durham, by a Committee appointed by the Board of Trade. Under the Mining Industry Act of 1920, a portion of this Fund was available for the provision of education for miners. Grants could be made from the Central Fund, to assist education authorities in making provision for the more advanced work in areas where satisfactory provision was already made in the preparatory stages, and a satisfactory co-ordinated scheme of mining education existed. Accordingly, on the 15th November, 1926 the Miners' Welfare Fund Committee was contacted and agreed to give the money, leaving Sunderland Corporation with only £1,945 to find for the remaining extensions. This money was borrowed with the approval of the Board of Education and ranked for grant. The building went ahead, but unfortunately once again requirements were

outpacing their provision. After a further visit by the University of London's Inspectors (19th November, 1928) they stated that although they were favourably impressed by the quality and variety of the work done, before recognition could be granted, three conditions had to be fulfilled:-

1. That a separate Department of Pharmacy should be created.
2. That the accommodation for the teaching of Botany and Pharmacognosy should be considerably extended and the equipment for Dispensing and Practical Pharmacy improved to include various types of apparatus in use in well-equipped laboratories.
3. That a Staff Common Room and facilities for research extended.(11)

This story was repeated because after agreeing to the three points above, by the time the Inspectors visited the College again on the 9th December, 1929, they had visited Schools of Pharmacy at Glasgow, Aberdeen, Birmingham and Brighton and their essential requirements for recognition were more demanding. More equipment was needed and the present lecturer had to be given the status of Head of Department and her salary increased to £500. These conditions were agreed to (12) and on the 17th July, 1930 a letter from the University of London said "that the Technical College, Sunderland be added as from September, 1930, to the lists of Institutions recognised for the purposes of issuing course certificates for the B. Pharm.

Degree for External Students for a period of three years." This recognition was only provisional and the report of the joint Inspectors for the University of London and the Pharmaceutical Society who visited the College on the 14th June, 1933 is as follows ".... It was found that all the requirements of July, 1929 had been fully complied with viz. a laboratory for pharmaceutical technology had been established, that the general equipment of the Department, including the library had been considerably improved that the staffing of the Botany Department had been brought up to a satisfactory standard by the appointment of a full-time lecturer in that subject.

Four points remain which the Inspectors feel bound to draw attention viz.

a) The accommodation generally for the Pharmacy Department is somewhat cramped.

b) That the arrangements for teaching those sections of the course that relate to Bacteriology are not satisfactory and should be re-arranged in co-operation with the Infirmary or the Medical Officer of Health.

c) That owing to the re-organisation work necessary in some sections of the College, no research work has been carried out in connection with either Pharmacy or Botany.

d) That the salaries paid to the assistant teachers in this

Department are lower than is fitting for teaching of University standard.

The Inspectors however, desire to record their appreciation of the specific improvements made by the College in times of great difficulty and the spirit that animates the College Authorities in their ambition to develop the College as fully as financial conditions permit. They therefore say that the temporary recognition accorded to this College should be extended for a further period of two years and that the question of granting the full period of five years should be reconsidered in the light of the observations set out above when the two year period of temporary recognition has elapsed." (13)

The College did its best to remedy these faults and made arrangements for Dr. H.A. Cookson, Pathologist at the Sunderland Royal Infirmary to give ten lectures in Bacteriorology at a fee of £1. 11s. 6d. per lecture. These were almost successful but the Joint Inspectors again visited the College seventeen months later in October, 1935. The Inspectors made a special visit to see the conditions under which the Course in Biochemical Analysis and Bacteriorology was given in the Royal Infirmary, and they were satisfied with this also with the Staff Room accommodation, staff salaries, the way the course had been extended to meet the new needs of the

syllabus, and very impressed with the fitting and equipping of a large laboratory for the teaching of Physiology and the small laboratory for Physical Chemistry. But although some research was being carried out, this was considered unsatisfactory and because of this weakness on the research side they once again only gave limited approval for three years, as from October, 1935 instead of the normal five years. The whole question of renewal of recognition would then depend upon the extent to which improvements in the provision of research had been brought about. Additional provision for research in the Pharmaceutical Department among the extensions described later in this chapter were sufficient to satisfy the Inspectors, because in March 1939 (14) the University of London gave recognition to the Sunderland Technical College for a period of five years from October 1939 and this problem never occurred again.

During this period between the Wars, whilst recognition for the more advanced work of University status was being achieved, the provision of other aspects of further education proceeded smoothly if not so spectacularly.

In the 1922/23 Prospectus for Mathematics and Physics and University of London Evening Courses, first mention is made on Page 3, of the National Certificate Scheme introduced by the Institution of Mechanical Engineering.

1. The Institution of Mechanical Engineering, in conjunction

with the Board of Education have approved a scheme for the award of Certificates in respect of part-time grouped courses in Engineering :-

Ordinary	3rd, 4th and 5th Years, Sunderland Technical College Engineering Courses.
Higher	6th and 7th Years, Sunderland Technical College Engineering Courses.

.....

5) The Certificates will have a National value, as the same Board of Assessors act for all the chief Technical Colleges in the country, who present candidates for these examinations...."

Finally, the Prospectus states "In 1922 there were awarded three Higher Certificates (with two distinctions) and 48 Ordinary Certificates (with 14 distinctions)" so that Sunderland had utilised the scheme from its conception in 1921. By 1926, the National Certificate scheme was fully operational and by 1932 the following range of subjects was being offered, most of them at Higher National Certificate or Degree level :-

Mathematics, Physics, Mechanical Engineering, Electrical Engineering, Building, Naval Architecture, Chemistry, Botony, Languages, Geology, Mining, Dispensary, Pharmacy and Pharmacognosy. The College was fed by six junior evening

schools and three senior evening institutes and the Bede Secondary School took the University of Durham Schol Leaving Certificate Examination to facilitate matriculation in the University of Durham. Nearly all of this further education was based upon evening work, occupying three evenings a week for several years, the College itself offering ten year integrated courses to Higher National Certificate level. In 1932, Principal Mundella retired and issued the following statistics which illustrate this predominance upon evening work which was, of course, a National characteristic of our further education as described in Chapter 8.

Evening Institutes

	No. of indiv. students	No. of actual student hrs.	Actual student hrs. per studen
1911-1912	1220	100,468	82
1930-1931	1784	150,788	85
Technical College			
1911-1912	354	25,100	71
1930-1931	700	97,094	139
		(130 day students)	

College Evening Classes	No. of Classes	No. of Students
Monday	26	415
Tuesday	24	406
Wednesday	31	501
Thursday	25	390
Friday	20	286
	126	

Mr. Mundella was replaced by Mr. E.R. Verity, B.Sc., A.R.C.Sc., at a salary of £800 rising by £50 to £1,000. He had been Head of the Mathematics Department and he was a appointed Principal of the Technical College only, Mr. W. Thompson, M.Ed., B.Sc., became Supervisor of the Evening Institutes. Mr. Thompson was one of the first men to be awarded an M.Ed. Degree by the University of Durham and he eventually became the Director of Education for Sunderland. Under the new Principal the College proceeded as before, the external examiners were pleased with the standard of work achieved and each Prospectus published its list of successes.

The Students' Union formed on the 14th May, 1928 (15) was given facilities on the new playing fields and tennis courts, bought from a £3,000 donation given by the late Mr. W.N. Bartram, on land at Seaburn which was levelled and fenced by the unemployed of Sunderland.

On the 22nd January, 1934 a letter received from the Senate of the University of London said that "the Sunderland Technical College be recognised for a period of 5 years as from October, 1933 in the following subjects of the B.Sc.(Eng.) Examination :-

Group A

1. Theory of Machines and Machine Design.
2. Theory.
3. Strength and Elasticity of Materials.
4. Electrical Technology.

5. The Mechanics of Fluids (Section A & B)
6. Surveying.
7. Applied Thermodynamics.
8. Electrical Machine and Design.
9. Electric Power; Generation, Transmission and Utilisation.
12. Advanced Theory of Machines and Machine Design.
13. Advanced Theory of Structures and Structural Design
14. Mathematics. (16)

This success was repeated again without difficulty on the 29th March, 1939 when recognition for a period of five years, as from October, 1939 was received from the University of London for the B.Sc. (Eng.) Examination for :-

Part 1 All subjects.

Part 2 6. Mechanics.
7. Surveying.
8. Applied thermodynamics.
9. Principles and Design of Electrical Machines.
10. Electrical Power.
13. Theory of Machines.

14. Theory of Structures.

15. Strength and Elasticity of Materials.

The most important development during the six years of Mr. Verity's Principal ship concerned the expansion of departments other than Engineering and the new extensions built to accommodate them. On the 19th March, 1934 part-time day courses in Mining commenced and by January, 1935 the recent developments in the mining and pharmacy departments (18) made further accommodation for these departments an urgent necessity. Attention was also drawn by the Principal to the inadequate provision for the technical training of students in the Building Trades and there was an urgent need for Common Rooms, Dining Halls, Gymnasium and extra classrooms. The need of a well-stocked College Library, with free access to the standard works of reference had been felt for many years and had been mentioned by various Inspectors. This situation was brought to the notice of Sir John Priestman, by Alderman F.M. Swan (upon whom the mantle of Dr. R.G. Bell seemed to have fallen) who then gave £20,000 for the provision of a College Library with accommodation for 10,000 books. The Miners' Welfare Committee at first agreed to give £7,500 towards the cost of extensions on the understanding that the Mining students should benefit from all of the new facilities provided. Before the extensions were completed the sum contributed by the Miners'

Welfare Fund rose to £15,000. The proposed extensions were to cost about £47,000 and were situated immediately opposite the original Technical College. The eastern section of the block was occupied by the Sir John Priestman Library whilst the remainder of the site was occupied by the Mathematics Department and the Mining Department. It also included elementary and advanced laboratories, surveying rooms, mining gallery, classrooms, gymnasium, refectory, common rooms and those essentials to the development of the corporate life of a college. (19)

The work done by other establishments of further education progressed satisfactorily as can be seen by list of successes published each year, and from reports given by H.M. Inspectors. Extracts given from the report of their visit on 31st July 1933 are typical of the development of the Villiers Street Junior Technical School over the period 1919-1939 (20)

"....., the premises have been increased ..... the School has taken full advantages of the consequent increase in facilities ..... Since the retirement of the former Principal of the Technical College, the School is no longer under the control of the College. The Head Master now reports to the Chief Officer through his Inspector, who is also responsible for the supervision of all evening schools other than the Technical College. The School thus retains its close touch

with the evening school system, and it is unlikely that the alteration will in any adverse way affect the close co-ordination that has always existed between it and the College."

The curriculum and distribution of time for the nine forms of 28 boys of which one form left each term was as follows :-

English	4½
History	¾
Geography	¾
Mathematics	5½
Mechanics	2¼
Physics	3
Chemistry	1½
Technical Drawing	3
Geometry	1½
Workshop	4½
Physical Exercises	¾
Games	2
	30

The summary following indicates the Inspectors' approval of the work done.

"a) Good use is made of the recent additions to the

premises, especially the new woodwork shop.

b) The School is satisfactory and the teaching, in general, efficient.

c) The time allotted to History and Geography should be extended.

f) It may be justifiable to include French in the curriculum for a small number of boys."

Statistics given for the occupations taken up by the pupils on leaving the School showed that most of the boys obtained jobs connected with some industry of an engineering type, even the "commercial occupations" being directly connected with engineering.

The progress of the other Evening Institutes in Sunderland can be judged from the H.M. Inspectors' Report on their visit of 31st July 1937 (21) The dominance of the Technical College over all forms of further education can be seen from "It is apparently the main object of the courses to provide a training that will lead to the Senior Courses held at the Technical College..... It is, therefore, from this point of view that the courses have been judged..... In the past, a general supervision of the classes had been undertaken by the Technical College, but at present, it appears that each centre is to all intents and purposes, a collection of classes each in in the charge of a teacher free to reach the examination

goal in his own way .... An outstanding impression of the Inspector was the variation of the spirit of the work from school and from class to class." The statistics given show how little impact, further education had upon the school-leavers of Sunderland in the year 1936-37. The enrolments for the Junior Commercial Courses were: 108 girls and 119 boys, and for the Junior Technical Courses, no girls and 502 boys. In recent sessions, these numbers had been fairly constant with the one outstanding exception that Junior Technical Courses for boys had increased from an average of about 230 to over 500 in the year 1936-37. Only about 200 boys joined evening classes on leaving school, from an output of about 1,300 from Elementary and Senior Schools so only about 15% of the boy school leavers took advantage of the facilities for further education, whilst the system was of no importance whatsoever to girls. Perhaps this was due to the limiting affect of catering chiefly for those intending to go to the Technical College and insufficient provision of handicraft and domestic types of courses.

Thus it can be seen that in the twenty years between the wars, in spite of stringent financial economies, Sunderland, suffering severe unemployment in its major industries of ship-building, coal mining and heavy engineering, made remarkable progress in her provision of higher education. This was markedly so in the ease of the Technical College which expanded in buildings, staff and students, and received recognition for

some of her courses from the University of London and was affiliated to the University of Durham for others. It was also during this period that the Day Training College and the College of Art moved into the buildings which they still occupy.

Chapter 11.

Sunderland Technical College 3.

1939 - 1963.

Technology played a vital role in the British War Effort and between 1939-45 Sunderland Technical College played an important part in training servicemen and civilians in the new skills necessary for total War. The information for the work done in the Technical College is to be found in volumes 29-31 of the Higher Education Sub-Committee Minute Books and in the valedictory report of Principal Reid.(1) Mr. Francis H.Reid, B.Sc. was appointed Principal of the Technical College on the 21st.October, 1938 (2), having previously been Head of the Engineering Department at Sunderland from 1925-28; moved to be Head of the Engineering Department of the Borough Polytechnic from 1928-30; thence he was Principal of the Paddington Technical Institute from 1930-38; and he left Sunderland in 1945, to become Principal of the London County Council South East London Technical Institute, thus he was in charge throughout the War period.

On the 13th. February, 1939 a Board of Studies for the College was formed, composed of the Heads of Departments

and Chief Lecturers (where there was not a Head of Department) in order that they could frequently meet the Principal to discuss the working of the College. At the beginnning of the War, the whole of the full-time staff (teaching, administrative technical and janitors) volunteered, at a meeting on the 5th, Sept.1939, to make temporary blackout arrangements, temporary air raid shelters, and to place coverings on the windows. As a result of this, over 400 evening students were enrolled on the 11th. and 12th. September for the S2, S3, A1, and A2 classes. Evening classes actually opened, and teaching commenced on Monday, 18th. September, 1939, although the L.E.A.'s officials were opposed to this action and to the preparations which had been made. Sunderland Technical College was the"first in the field" (3) and the only technical college in the country which commenced their classes in accordance with their advertised programmes. The New Building containing the Priestman Library, Administrative Offices, Mining Dept., Refectory, Common Rooms, Class rooms and Gymnasium was officially opened by Sir John Priestman on the 24th. November, 1939, and Mr.W.Lawson M.P., officially opened the Mining Wing. There was strong opposition to the use of this block for teaching students, at the beginning of the War, but unfortunately it was used, and immediately used to such

capacity that new accommodation was immediately needed.

The 'normal' work of the College, Day and Evening, was above normal, except in the Building Department, the decrease in the number of building students being due to the fact that no reservation from National Service was granted to building apprentices. Throughout the war, special classes were introduced, beginning on the 7th.September, with what was the first special class, in connection with the War, held in Technical Colleges throughout the country. This was in Electrical Engineering for Signallers for 20 men of the 63rd.(N) A.A.Regt.R.A.(T.A.) In March, 1940, the Board of Education, in Circular 1505, asked that Technical Colleges should undertake the training of industrial personnel for the Engineering and Allied Trades in College Workshops. Since there were no workshops available in this College, a conference of Engineering and Shipbuilding, Employers, Trade Union Representatives and Councillors, decided to prepare a scheme for training skilled and semi-skilled labour and to acquire Engineering Workshops. This advisory Committee met on the 16th.April,1940 and resolved "that the Ministry of Labour be asked to set up a Training Centre in Sunderland" and "that early consideration be given to the setting up and equipping of suitable workshops in the Technical College."

In May 1940,at the request of the Director-of Military Training,the War Office, the College arranged a special course for the training of Army Personnel to become Engineer Artificers, R.E. This course was the first of its kind in the country and was later sub-divided so as to give training to a) Engine Fitters (Internal Combustion Engines) and b) Engine Fitters (Steam Reciprocating and Pumps). Also in May1940, a double classromm in the New Building was converted into an Electrical Installation Workshop and equipped for the training of Army Electricians. The first group of R.A.S.C.Personnel began training on the 3rd. August, 1940. In September, 1940, an Engine Fitters' Workshop was established in the New Building and equipped with the tools necessary to train approximately 20 men in relays, for War Industry. A temporary Fitters' Shop was equipped, using another double classroom and on the 18th.November, 1940, was used to train Army Personnel as Engine Fitters (R.E.). This work continued and in January, 1941, equipment was obtained for the training of Wireless Mechanics for the War Office; training began on 17th.March, 1941.

By Easter 1941, the College was running courses for Radio Mechanics, Electricians (R.A.O.C.), Electricians (R.A.S.C.) Engine Fitters (I.C.E.), Engine Fitters (S.R.) for the War

office; and Fitter and Turner Trainees for the Ministry of Labour and National Service; as well as the normal Day and Evening classes in Engineering, Naval Architecture, Building, Mining, Pharmacy, Physics, Chemistry and Mathematics.

In January, 1941, preparations began for the provision of a new Engineering Block, ~~was~~ were approved by the Board in July 1942, land adjoining the College was bought from Binns for £2,717, and it came into use in March 1943. Also in 1941, a special course of lectures was arranged on "Foremanship" and at the request of the British Council and the Turkish Consulate, Turkish students were admitted to the Engineering and Naval Architecture Day Diploma Courses.

In 1942, lectures were given on "Fuel Efficiency" and the Engineering Department carried out special tests for the Washington Chemical Company.

In April 1943, the first group of Engineering Cadets commenced a 21 months continuous course, and by May 1943, lectures were given on the Application of Welding to the Design of Ships". In October 1943, a group of Naval Electricians commenced a seven months intensive training course for the Higher National Certificates in Electrical Engineering. All the men who completed the course in May 1944, received Electrical Commissions in the R.N.V.R. During the War the students formed

on the 11th.December, 1940, the Sunderland Contingent of the Durham University Senior Training Corps and in April, 1941, co-operated in the formation of the University Air Squadron.

The table following serves as a useful summary of the Special Courses arranged during the period up to 31st.Dec.1944.

SPECIAL COURSES FOR WAR OFFICE, ADMIRALTY, and MINISTRY OF LABOUR & NATIONAL SERVICE.

	COURSE	NO.of STUDENTS	STUDENT HOURS
a.	63rd.N.(A.A)R.A.(T.A.)	20	1,440
b.	R.E. Engine Artificers	59	20,899
c.	R.E. Engine Fitters (I.C.)	60	34,700
d.	R.E. Engine Fitters (S.R.)	51	27,452
e.	R.E. Engine Hands (I.C.)	199	26,792
f.	R.A.S.C.Electricians	68	45,260
g.	R.A.O.C.Electricians	188	83,672
h.	R.A.(A.A.) Elec. Fire Control (Wireless Mechanics)	54	32,220
i.	R.A.O.C.Radio Mechanics	209	145,468
j.	R.E.M.E. Radio Mechanics	50	38,176
k.	R.A.(A.A.) Electrical Fitters	20	6,572
l.	R.A. Engine Fitters	14	9,080
m.	R.E.M.E. Intensive Training Course	53	38,166
n.	Naval Personnel (Electrical)	14	11,118
o.	Engineering Cadets	75	123,340
p.	Ministry of Labour Fitters	151	48,467
q.	Foremanship Course	27	1,618
		1,312	694,440

Appreciation for this work was shown in letters received from the Admiralty on the 20th. November, 1944, and from the Air Ministry on the 19th.November,1945.

Before the War ended, educational developments received urgent consideration by the Government and innumerable committees, the outcome of these being Mr.Butler's Education Act of 1944. To be ready for the post-war era, Principal Reid submitted a paper (5) to a special Post-War Development Committee appointed by the Governors, which decided on the following suggestions for future development:-

1. The advisability of seeking an extension of the Affiliation of the College to the University of Durham so as to include-
   a) Naval Architecture.
   b) Pure Science.(Physics, Chemistry, Biology, Botany, Physiology and Mathematics.)
2. The possible development of full-time day courses in the College for:-
   a) Senior and Advanced Commerce and Languages.(This would also make it possible for students to prepare for Degrees in Arts of the University of London.)
   b) Senior and Advanced Courses in Building.
   c) Senior and Advanced Courses in Mining.

3. The possible early development of part-time day courses in:-

   a) Engineering.

   b) Shipbuilding.

   c) Building.

   d) Mining.

   e) Commerce.

   f) Pre-nursing training.

4. The possibility of using the Technical College facilities in the emergency scheme for training of teachers.

5. The advisability of opening a Hostel for University and Pharmacy Students.

6. The completion of the Engineering Workshop Block.

7. The construction and equipment of Building Workshops.

8. Alterations to improve the existing facilities of the classrooms and laboratories of the Old Building.

Before he could see the fruition of these plans, Principal Reid resigned to become the Principal of S.E.London Technical institute, and he was replaced, on Jan.26th.1945, by Mr.D.A.Wrangham,M.Sc.(Lond.).Sen.Wh.Sc.,D.I?C.,M.I.Mech.E., A.C.G.I., who had been Head of the Engineering Department since 1st.Sept.1941.

Little came of these ambitious plans of Principal

Reid, or of the high hopes raised by the promise of the 1944 Education Act, of part-time education for all under 18. Indeed, further education and technical education in particular made extremely slow progress from the Percy Report until the publishing of the White Paper in 1956. Economies were imposed by the needs of national reconstruction, followed by the increased costs in defence necessitated by the beginning of the 'Cold War', Berlin Airlift and the Korean War etc. In 1946, the College re-commenced its peace-time work with a Principal, 9 Heads of Departments, 45 full-time teachers, 4 demonstrators and 175 part-time assistants, who taught 242 full-time students, 598 part-time students and 1,485 students attending evening classes. These numbers created severe overcrowding and a serious shortage of accommodation in lecture rooms and class rooms. Plans for extensions were approved by the Governors on 13th.Dec.1946, and this year also saw the beginning of new courses and research into methods of shipbuilding and work on new gas turbines. (6)

On 24th.April,1947, the College was recognised by the Institute of Physics and began to consider seeking affiliation to the University of Durham for Pharmacy and Pure Science. A setback was received in Oct. 1948, when the Inspectors of the University of London visited all the approved Pharmacy

institutions before recognising them as being of the standards required for the new regulations for B.Pharm.degree. None of the colleges, including Sunderland came up to the higher standards, more facilities for research, staff accommodation, extra laboratories were considered necessary. Provisional recognition was granted to carry on under the Old Regulations until the end of the year 1952/3. His Majesty's Inspectors who inspected the College in Feb.1952, were satisfied with much of the work but said..."the most serious shortage of accommodation is in lecture rooms and class rooms.. .. and leads to over large classes". (7) They found the courses provided were very much as pre-war except for the Building Department which had been established in 1943. The Building Department provided part-time day classes and evening classes for the Ordinary and Higher National Certificate in Carpentry and Joinery, Brickwork and Plastering. Courses were also given in Plumbing, Timber Technology, Gas Fitting, and Ship's Plumbing. Organisation and supervision was difficult because work was carried on in the main Building Department in Garden Street, a mile from the College, in the College itself, plumbing in the Colliery School and evening classes were held in the Villiers Street School. Chemistry and Biology courses were provided full-time and part-time, the courses and classes ranging in standard from that of the General Certificate of

Education (Ordinary) to the Special Honours B.Sc. (London - External). The work of the Engineering Department consisted of the provision of full-time courses for the Durham University Degree and for the Higher National Diploma, part-time courses for the Higher National Certificate in Electrical Engineering, the Ordinary National Certificate in Mechanical Engineering and the National Craftsman's Certificate for Motor Vehicle Service Mechanics, and evening courses for the Ordinary and Higher National Certificates for endorsements on the latter - and for some Trade Courses. The Naval Architecture Department provided a full-time course for the College Diploma in Naval Architecture, evening courses for Ordinary and Higher National Certificates in Naval Architecture and Practical Shipbuilding, and a part-time day course for Shipyard Welders. The College Diploma course in Naval Architecture was a three years sandwich course, six months in each year being spent at full-time studies and the other six months in practical work in shipyards or at sea. (This arrangement was considered unique by Professor Simms who thought the College Diploma Course one of the best in the country). The main body of the students for this course came from the local Apprentice-Student Scheme whereby those apprentices who did well in the S.2. year of the National Certificate course were transferred to the Diploma course. This scheme received much encouragement from local firms and attracted foreign students.

The Practical Shipbuilding course consisted of a four years evening course of two evenings per week comprising instruction in Practical Shipbuilding, Laying Off and Template Work.

The Pharmacy Department provided the following full-time courses:-

a) A two years Chemist and Druggist, and Pharmaceutical Chemist course.

b) A two years B.Pharm. (London University External) course.

The work of the Physics Department covered a wide range in all branches of Physics, much of the work being a service to other departments; the remainder was largely with classes preparing for External Degrees of London University in Pure Science and with a new course in Applied Physics. The students were full-time, part-time day or part-time evening according to the type of course followed, but the main effort was given to the full-time students.

The function of the Mathematics Department was also largely to serve other departments of the College wherever Mathematics was required as part of the course. The standard of work ranged from below the Ordinary level of the General Certificate of Education to that needed for an Honours Degree. The main effort was given to the preparation of full-time students for the internal B.Sc. degree in Applied Science of

Durham University, the external B.Sc. degrees in Science and Engineering of London University and the Higher National Diploma in Engineering. There were, in addition, part-time day and evening classes for the various National Certificate and similar courses.

The Mining Department had increased in importance and much more use was made of its facilities after the Nationalisation of the mines. This is well illustrated by the marked increase in part-time students during the early 1950s. This department provided part-time day and evening courses in Mining and Mine Surveying, and in addition, classes in Geology were given to full-time students in Civil Engineering. No pre-senior work was done. Special part-time day classes for the training of colliery deputies, based upon attendance of three days a week for seven weeks was also a feature of the post-war training. (8)

Thus it can be seen that the work of the College after the War was mainly concerned with Building, Engineering, Mining and Science, with no Commercial and little or no Trade courses. Also much of the work was being done in providing full-time courses for students at advanced levels and this prevented the development of part-time day classes. Over the period covered by the following table, the full-time work has increased by 55%, while the evening and part-time day work

has increased by only 19% in each case.

STUDENT HOURS

Year	Full-time	Part-time Day	Evening	Total
1947-48	263,991	93,160	173,676	530,827
1948-49	316,512	70,611	192,471	579,594
1949-50	355,830	82,817	201,484	640,131
1950-51	410,184	110,920	206,518	727,622

(9)

The recommendations of this Inspection were for an increase in laboratories, class rooms, the provision of Trade and Commercial courses and hostel accommodation for full-time students. In an attempt to deal with the needs for new courses, the expansion, and needs of existing departments, £148,000 was spent on building an additional wing to the College, which would house the Physics Department and the new Commerce and Domestic Science Departments in 1953. This was all that survived of the Authority's brave plans (10) drawn up in 1951, in answer to the Ministry of Education's handbook, called FURTHER EDUCATION which had contained advice on the implementation of the 1944 Act. In order to try and end the dependence upon evening work and encourage day release, the Authority envisaged establishing four new county colleges with major extensions to the Technical and the College of Art. The estimated capital expenditure was:-

Actual	1948-49	£14.500
Actual	1949-50	£16,000
Proposed	1950-51	£79,000
Proppsed	1951-52	£404,000
Proposed	1952-53	£521,000 (11)

but because of the economic situation, these plans were shelved.

In 1953, the new wing was completed and the Prospectus for the year 1952-53 lists the Department of Commerce with a Head and three lecturers, and a Department of Housecrafts with a Head and two lecturers. The Commerce Department, reformed after 1908, provided full-time courses, part-time day and evening courses, some of which had to be held in West Park Secondary School. The full-time courses were designed to prepare entrants to such positions as those of short-hand typists and general clerks. The part-time day courses were intended to supplement the training of those already engaged in Commerce and who gained day release. For those only able to attend evening classes (which comprised the bulk of staff engaged in clerical duties) courses were arranged in shorthand, typewriting and also to prepare students for the National Certificate in Commerce, for the Examinations of Professional Associations and for the Degree in Economics of the London

University. An important new course organised, was that in Management Studies for those who, having completed their technical training, wished to enter the executive side of industry or commerce, or for those already in executive positions who wished to make further progress in a managerial career. The establishment of this course illustrated the slow implementation of the recommendations of the Percy-Report previously described:- "In their 1945 Report on Higher Technological Education, the Percy Committee made the following observations:- "We were impressed by the statement made by several witnesses that the highly trained technician is often ignorant of the principles of industrial organisation and management and that he often shows no inclination to accept administrative responsibility. Admittedly, there is much in this field that can be learnt only from experience; but there is a body of knowledge, awareness of which may greatly facilitate the process of learning."

Following upon the Percy Report, the Urwick Committee on Education for Management was appointed by the Minister of Education to advise on schemes of training. This Committee recommended the establishment of two qualifications in Management Studies - the Common Intermediate Certificate, and the Diploma. Courses preparing the students for these

qualifications are sponsored jointly by the Ministry of Education and the British Institute of Management, a body founded in 1947 to assist in improving the standards of management practice in this country.

The Common Intermediate Certificate has been accepted as giving complete exemption from their own Intermediate Examination by the following organisations:- the Institute of Industrial Administration, the Office Management Association, the Purchasing Officers' Association, the Institute of Personnel Management, the Institution of Works managers, the Incorporated Sales Managers' Association.

"The following courses for the Common Intermediate Certificate are arranged at the College:-

a) Part-time Day Course, necessitating attendance on one day and one evening per week and extending over two academic sessions;

b) Evening Course, requiring attendance on two evenings weekly and lasting for three academic sessions. " (12)

The extension completed in 1953 also enabled the College to establish a Department of Housecrafts about which the Prospectus said:- "The main purpose of Housecraft studies today is in order to raise the standard of home life by ensuring that the primary needs of the family are met with the maximum regard to tastefulness, efficiency and economy.

The ever-increasing demand for Further Education clearly demonstrates the modern woman's realisation that she must have appropriate training if she is to play her part more effectively in her chosen trade, profession or in the home." The aim of the Department was to cater for two types of student; those desiring vocational training for a career in certain industries and trades, or as teachers in establishments for Further Education; and for those looking forward to employment in the home or for housewives. It was considered that the first group would not be confined to women and girls but would satisfy the needs of men and boys in the Catering and Bakery Trades. For their benefit, courses were available to prepare students for the City and Guilds of London Institute Examinations in Catering, Needlework and Plain Cookery, and in Tailoring. In order to help girls,with a leaning towards Housecraft subjects, who had just left school, provision was made in the Department for a one year pre-vocational course of full-time study. This course was designed to improve the students' general education, whilst maintaining an emphasis on Housecraft subjects which would establish the foundations for more specialised vocational studies in subsequent sessions. (13)

With the ending of the Korean War in 1954, and an improvement in the economic situation, it was now possible

to attempt to deal with some of the deficiencies in the national provision of further education. The White Paper of 1956 attempted to deal with the chief difficulty by promising a national building programme of £9 million in 1955/6, followed by a further £70 million by 1960. The provisions of this Paper had a profound affect upon further education in Sunderland in three major ways. Advanced work was stimulated in the Technical College, and two new colleges, the West Park College of Further Education and the Monkwearmouth College of Further Education came into being. The development of each of these establishments will be dealt with seperately.

The output of advanced courses was to be increased by 50% and therefore, plans were immediately made for expansion of the main building. On sandwich courses, the Government endorsed the **Weeks' Report** (14) which recommended a Diploma in Technology, including management and economics as suitable subjects, a six monthly college/ works/ college/ works schedule and good co-operation between colleges and industry. With its long tradition of sandwich courses and excellent relations with local industries, Sunderland Technical College was well situated to adopt the Diploma in Technology. Post-graduate studies were developed and in a short time, the College had important achievements to its credit in the fields of analogue computing and allergy studies.

In the session, 1956/57 the Commerce Department increased its staff and changed its name to Commerce and Administration as the new Department's Prospectus said - "since, to an ever-increasing degree, our national economic needs require of office worker and technologist alike, skill and knowledge in dealing with the increased complexity of problems of finance, industry and trade. As the recent White Paper on Technical Education states, "The range of technical education goes far beyond the study of materials and mechanics. Accountancy, costing, salesmanship, commercial skills of all kinds, including foreign languages, are equally important to a great trading nation. Full employment brings new problems which are more likely to be soluble the wider is the understanding of how our economy works. Such subjects as economics, business management, wage systems and human relations must now be given more prominence. "

The following year, the Department of Housecrafts got a new look, increased its staff and became the Department of Food and Clothing Technology.

Of more importance to Sunderland was that the White Paper had listed 22 Colleges in England, of which Sunderland was the only one in the North East, providing courses eligible for the 75% grant for advanced work. Also, proposed colleges of advanced technology were to remain in L.E.A. control. The

White Paper also stated "The Government now wish to see the proportion of advanced work at these colleges vigorously increased, so that as many of them as possible may develop speedily into Colleges of Advanced Technology." This was the green light for the expansion of the College which c continued, not without many heart searching decisions by the Governors until the formation of the Polytechnic in 1969. In recognition of the growing need to provide increased and improved facilities for training in Engineering and allied technologies required for C.A.T. status, the Authority received permission to embark on a major development programme with the two-fold object of facilitating the development of the advanced courses operated in the Technical College, and of making new and adequate provision for the courses which were, in consequence, to be transferred from it. All work to S3 standard was transferred to temporary premises in an old Board School. The construction of new buildings for the West Park College of Further Education, costing £187,000 began in 1957, completed in 1959, and equipped at a cost of £80,000. This new College was intended to specialise in Ordinary National Certificate Courses and Trade Courses in the fields of Electrical Engineering, Mechanical Engineering, and Naval Architecture. There were also evening classes in subjects such as Car Maintenance, Radio & Television Repairs,etc.

In 1965, the adjoining West Park Secondary Girls' School was taken over and today the West Park College houses the Depts. of Building, Engineering, Shipbuilding and Mining.

In the North East, the three Technical Colleges of Rutherford (Newcastle-upon-Tyne), Sunderland and Constantine (Middlesbrough) had always been keen rivals, but now they all expanded rapidly, hoping to become Colleges of Advanced Technology. Since Sunderland did more research and advanced work of degree standard than the other two, hopes ran high that she would become the North Eastern C.A.T. On the 21st. May 1957, Viscount Hailsham, the Minister of Education visited all three and dashed Sunderland's hopes by preferring Newcastle's Rutherford Technical College. (16) He did not make it a C.A.T. immediately, but designated it as one for some future time when it fulfilled necessary conditions. Sunderland continued to push ahead with her expansion programme and the building programme was announced on the 30th.Aug.1957. The L.E.A., with the approval of the Ministry of Education, intended to spend a sum of £559,000 for a new teaching and administrative block, £353,000 for the hostel (with 150 study bedrooms) and Students' Union and a further £300,000 approximately for equipment. The expenditure undertaken would be in the region of £1,300,000 and this was considered not an end but a beginning to further expansion and land was earmarked

for this purpose. The Corporation decided to use a compulsory purchase order to obtain the full use of 'the Green' the land near to the original college building. The Governors of the College and the Conservatives on the Corporation favoured the South Johnson Street site, because it had no historical value and offered more room for future expansion, but were overruled. However, on the 25th. January 1959, the Corporation had a change of mind and decided to go ahead with the South Johnson Street scheme, since it offered more opportunities for future expansion. Indeed, at the present, the College has used between 4 and 5 acres of the 11½ acres available.

With these expansions, the College hoped to provide equivalent accommodation and standards as those provided in a University. The Hives Council had already recognised three of Sunderland's courses for the Diploma in Technology, namely Civil Engineering, Applied Physics and Naval Architecture, and it was hoped that Electrical Engineering would receive recognition as from September, 1961, and Mechanical Engineering in September, 1962. Since Rutherford College, Newcastle, although designated at some future time, to be a College of Advanced Technology, had no single courses approved by the Hives Council and at Middlesbrough, only the course in Mechanical Engineering was recognised, Sunderland, which also

carried out far more advanced research, had high hopes of ultimately becoming a C.A.T. also.

February 1961, saw the Ministry's publication 'BETTER OPPORTUNITIES in TECHNICAL EDUCATION' which had four main objects, as described in Chapter 8. In accordance with these and as part of the programme of concentrating the advanced work in the main buildings of the Technical College, the departments of Commerce, Food and Clothing, and General Studies were expanded and moved into buildings vacated by the Monkwearmouth Grammar School, to become the Monkwearmouth College of Further Education whose development is described later. Great policy decisions had to be made in 1961, because not only was Rutherford College the one designated to become a C.A.T., but the possibility of remaining a Regional College was by no means guaranteed, the Report of the Robbins' Committee, when published, could result in far reaching changes and finally, arrangements were proceeding to divide the University of Durham into two Universities, one situated in Durham and the other in Newcastle. In 1961, the College had about 495 students doing advanced work of degree standard, of these 231 were reading for Durham University Degrees in Mechanical (90), Marine (25), Electrical (63), and Civil (53) Engineering and over 100 were working for London University Degrees, chiefly in Biology and Pharmacy. Thus, since the

University of Durham, in its new form, would not have any schools of engineering, there was nothing to which the Sunderland schools of engineering could possibly affiliate. Also, with the expansion of Universities, especially that at Newcastle, it seemed possible that all degree work in the future could be accommodated in the Universities. The Authority now began to consider the possibility of concentrating the College's advanced work on the Diplomas of Technology, but were afraid that perhaps this work would ultimately have to be transferred to the Rutherford C.A.T., leaving Sunderland little or no advanced work or research. The possibility of establishing a University College in Sunderland was considered, but thought unlikely since Newcastle University was only 12 miles away and Durham University 10 miles. This was not considered altogether a good idea because the Authority would have no control over the College, and all work, not of degree standing, would have to be transferred to technical colleges outside the area or another technical college built. The Ministry of Education's Circular 3/61 on Regional Colleges, received in March 1961, also caused ~~consideration~~ consternation since it stated;- "1) The Ministry, having designated all the C.A.T.s for the time being, are now concerned with the remaining Colleges. These Colleges may be placed in one of three categories a) Regional Colleges. b) Area Colleges c) Local Colleges.

3) The fact that a college is already a regional college is not an assurance that it will continue to be so.... there may be cases where the Minister has to make a choice, and geographical considerations will not entitle a College to Regional Status....

4).... the Minister will have to be satisfied that :-

a) there is sufficient volume of advanced work, and facilities for research.

b) the staffing arrangements are adequate.

c) the premises are suitable.

d) the arrangements for the government of the College are adequate. "

The Governors knew that the first three requirements gave no grounds for alarm in the case of Sunderland, but that the Minister was not satisfied with the arrangements for the government of the College. Circular 7/59 required the Governors to be strengthened by representatives of industry and commerce, more power to lie in the hands of the Principal, and the Governors were to have more control over spending of money and appointment of staff.

To ensure that the College retained its status as a Regional College, the wishes of the Ministry, as expressed in Circular 7/59 were taken into account and on the 6th.April 1961, at a special meeting of the Governors of the Technical

College, the Instrument and Articles of Government of the Sunderland Technical College were approved. By 2nd.June, 1961 the outlook was clearer about degree work, because by then the Senate and Court of the existing Durham University had made the decision that the Sunderland College should comtinue to be affiliated, and that this affiliation should be with the University to be established in Newcastle (17). But the future of the Technical College, which had a greater number of full-time students, carried a larger volume of high level courses , with more approved Dip.Tech. courses than some of the C.A.T.s in the country, was still obscure, and had to await the publishing of the Robbins Report. During this period, the College also received its sixth Principal, when the Vice-Principal, Mr.M.Hutton,Ph.D.,B.A.(Dunelm), who had also worked in the Mathematics Department, succeeded Mr.Wrangham.

On the 6th.March 1964, H.R.H.The Prince Philip, Duke of Edinburgh, K.G.,K.T.,G.B.E., opened the integrated group of buildings which had been erected by the Public Works Department, on the five acre site in South Johnson Street. These consisted of a complex teaching and administrative block, containing the three Engineering Departments, the Chemistry and Radioactive Techniques Laboratories, the Naval Architecture Drawing Offices and a wide variety of research and lecture

rooms known as the Wearmouth Hall. A Hall of Residence called the Wearmouth Hall of Residence was ten storeys high, contained 150 study bedrooms (since increased to 250) and this made Sunderland the first Technical College in the N.E. with residential accommodation. The building included a large assembly hall, fully equipped for theatrical work, a students dining room sitting 200, and a cafeteria to seat 300. There were ample common rooms, bar, games room, Union office and committee rooms, staff common room and dining room, and a large gymnasium with a covered heated swimming pool. The original building, opened in 1921, and extended on three occasions, was successfully altered, well-equipped with teaching and research laboratories, and devoted entirely to the School of Pharmacy. This school, established in 1921, with 21 students, was now one of the largest in the country with an annual intake of nearly 100 undergraduates, and a total student population approaching 300. Pre-graduate courses were offered for the Pharmaceutical Chemist Qualifying Examination and London Bachelor of Pharmacy Degree, and there were post-graduate research facilities, leading to further degrees or qualifications such as Fellowship of the Pharmaceutical Society, Master of Pharmacy, Master of Science, and Doctor of Philosophy. The expansion made possible by these new buildings turned the College into one of the two largest

Regional Colleges in the country, with almost 900 full-time degree level students and as many more studying part-time to the same goals. (18) The advanced courses were:-

UNIVERSITY DEGREES.

Civil Engineering	B.Sc. (Durham)
Civil Engineering	B.Sc. (Durham)
Electrical Engineering	B.Sc. (Durham)
Electrical Engineering	B.Sc. (London)
Marine Engineering	B.Sc. (Durham)
Mechanical Engineering	B.Sc. (Durham)
Mechanical Engineering	B.Sc. (London)
Pharmacy	B.Pharm. (London)
Pure Science	B.Sc.General (London)

Diplomas in Technology.

Applied Physics Civil Engineering. Naval Architecture.

Graduate Membership of Professional Institutions.

Graduate	Royal Institute of Chemistry.
Graduate	Institute of Physics.

Higher National and other Diplomas.

Building.	Higher National Diploma.
Electrical Engineering	Higher National Diploma.
Mechanical Engineering	Higher National Diploma.
Mining	National Diploma in Mining.
Naval Architecture	College Diploma.
Pharmacy	Diploma of Pharmaceutical Society.

Higher National Certificates.

Applied Physics	Building
Chemistry	Electrical Engineering.
Mining	Mechanical Engineering.
Naval Architecture.	

This is probably a useful point at which to leave the Technical College (waiting for Robbins) and consider the development of the two branch Colleges of West Park and Monkwearmouth.

Construction on West Park College began in 1957 as part of a plan with two objects in view. First, to transfer from the main Technical College, courses below advanced standard leaving that establishment to concentrate on work of University level; and second, to make more extensive provision for the courses that were to be transferred, and so extend their range to make within Sunderland, a fully comprehensive system of courses suited to the needs of local industry and commerce. During construction it became clear that the expansion of technical education would require additional buildings and a plan was drawn up in 1958 to provide for two Colleges of Further Education in the town, in addition to the Technical College. Plans for West Park College were amended to allow it to provide, on opening, for work up to the Ordinary National Certificate and Final City and Guilds level in Mechanical

and Electrial Engineering, and Naval Architecture, and for transfer of all Building work to the College at a later stage. The College, to be built and equipped at a cost of some £260,000, was only to be the first stage of a centre of Further Education which was intended to expand across the sites of the adjacent Cowan Terrace and West Park Secondary Schools. In the enlarged College, it was hoped to provide not only much more commodious accommodation for courses at craftsmen and technical level in the engineering and allied technologies, but also a new Department of Building to replace that at present housed in two redundant schools at Villiers Street and Garden Street, and a more generous range of accommodation for Mining Courses. This was to be provided in two phases, the first to start in 1962, at an estimated cost of £137,000 and the second, at a cost of £269,000 to follow on as soon as possible. (19)

The College was opened in September, 1959, and the courses offered were:-

<u>Ordinary National Certificates.</u>

Electrical Engineering. Mechanical Engineering. Naval Architecture

<u>City and Guilds Certificates.</u>

Electrical Fitters. Electrical Installation. Electrical Technicians. Motor Vehicle Mechanics. Shipbuilding. Machine Shop Engineering. Mechanical Engineering Craft Practice. Sheet Metal Work. Welding Technicians.

College Certificates.

Practical Shipbuilding. Welding.

Full-time Apprenticeship Courses.

Engineering. Shipbuilding. Mining.

(20)

It was an immediate success, the popularity of the courses offered can be seen from the Table of Student Growth, obtained from the Report of H.M.Inspectors, on their inspection in November 1962. This table shows a healthy increase in the numbers of full-time staff and students and the all round increase due to the effects of the 1961 White Paper.

Year.	Full-time Day.	Part-time Day.	Evening.	Full-time staff.	Part-time staff.
Sept.1959	40	773	596	15	103
Sept.1960	102	978	596	26	105
Sept.1961	134	1155	940	39	135
Sept.1962	186	1734	897	65	155

(21)

The major issues raised by the inspection concerned the Governors, the Advisory Committees, the College site and the students. The Governing Body of the College was that appointed for the Sunderland Technical College. It was constituted as a sub-committee of, and appointed by, the Education Committee,

and of its 36 members, 21 were nominated by the Education Committee. The Report said;- "The growth of the West Park College has been such that its present maturity and the rapidly increasing volume of work and development now involved, fully justify the appointment of a separate governing body for the college. Although some members may well be members of the governing body of each college, and indeed, in the interests of liaison this is desirable, the industrial and academic associations required by the two organisations vary widely in a number of instances and a separate governing body would allow these divergent needs to be met more effectively." No action was taken on this until the future of the main College was known with greater certainty. The Inspectors found that the College staff was associated with only one advisory committee, that established at the Technical College for advanced building and civil engineering. They considered that there was an urgent need to create suitable advisory committees for all departments, both to ensure adequate liaison between the Technical College and West Park where appropriate, and also to ensure the full participation and contribution from industry in the work of the various departments and their specialized sections. This recommendation was promptly acted upon. The Report criticised the

lack of a Students' Union but gives its own resons for this when it describes the youthfulness of the student population. "Of the student total in 1961/62 only 12% were over 21 years of age, 61% being under 18, 79% came to the college from secondary modern schools and 19% from grammar and secondary technical schools. Only 7 female students attended the main vocational courses although a further 57 attended the owner-drivers' course. In the present session, 18% of students came from County Durham, 1% from South Shields, and there were 9 overseas students, the remainder, a substantial majority, coming from Sunderland." (22)

What caused great concern was the use of annexes in South Johnson Street, Villiers Street and the West Park Secondary Technical School, and the restricted site available for extensions to accommodate these near the College. The problem was further aggravated by the necessity to provide access roads, car parking facilities etc. for the proposed new Town Hall buildings, and which imposed aesthetic restrictions on the future College buildings. In later minutes, mention is made of the search for a different site to accommodate a completely new complex of buildings. Of four possible sites, the two Inspectors helping with the task, favoured building on land surrounding the Art College,

Backhouse Park, but in the minutes of the Governors' meeting held on the 20th.Dec.1966, it was decided to build the new college on land known as Sparks Farm.

The trends in the development of West Park can be seen from the next table of student numbers.

STUDENT NUMBERS.

Year	Full-time	Part-time(Day)	Evening.
1963-64	128	1,728	492
1964-65	150	1,742	477
1965-66	283	1,967	318
1966-67	327	2,363	344
1967-68	220	2,371	240
1968-69	220	1,972	209
1969-70	195	1,867	231

(23)

The decline in attendance at Evening Classes is interesting and is due to a deliberate policy to encourage the day release of young workers. Apart from the very popular evening recreational course in motor vehicle maintenance, the other evening classes are the latter years of long courses and are being discontinued as students complete them. The increase in the number of full-time and part-time day students after 1964 is very noticeable, and is largely due to the affect of the Industrial Training Act of 1964. Three of the

major industries, Shipbuilding, Engineering and Building, served ~~kkm~~ by the College, have Industrial Training Boards, and the increase in numbers in the three departments in day time work is to some extent, a measure of their effectiveness.

Monkwearmouth College of Further Education is one of two institutions within the Sunderland Authority, which deals with lower level work in Further Education, and it has specific interests in the non-technological field since, as already described, the courses in Engineering and Building are located in West Park College. The College was originally housed in a building in Swan Street, vacated by Monkwearmouth Grammar School when it moved to a new, well-equipped building on a spacious site. Certain adaptations at a cost of £20,000, especially in Science Laboratories, were carried out before its opening in September, 1962, when it became responsible for a range of courses at School and Intermediate levels which, until then, were offered at Sunderland Technical College. During the session 1962-63, it was organised in two departments namely; the Department of Commerce and Administration which was responsible for Secretarial and Business Studies, and General Studies (General Certificate of Education); and the Department of Science which was responsible for G.C.E. courses in Science subjects, the Ordinary National Certificates in Chemistry and Applied Mathematics. The need for a College

of this type and its successful development can be seen from the following figures:-

STAFF INCREASES.		1962	to	1969
Heads of Departments	from	2	to	4
Full-time Teachers	from	31	to	76
Clerical Officers	from	6	to	8
Technical Staff	from	7	to	10

Academic Year	Total Student Hours.
1962-63	549,841
1968-69	710,410 (24)

Further extensions to the College were finished in 1964, at a cost of £234,000, furniture and equipment for both phases costing £73,000. The new building consists of a three storey block containing a number of classrooms, staff rooms, student common rooms, the Lecture Theatre, Library, Refectory and kitchens. The Applied Physics workshops in this new building was eventually adapted as a Glass Technology Workshop. In 1963/64, the Department of Food and Clothing Technology was transferred from the Technical College to Monkwearmouth College and the expansion of the work in the Department of Commerce and Administration made it necessary to split this Department into a Department of Business Studies and Languages, and a Department of General Studies. This

structure, which has continued to the present time, resulted in the College being organised into four Departments:-

	Full-time staff 1963-64
Department of Business Studies and Languages	19
Department of Food and Clothing Technology	11
Department of General Studies	20
Department of Science	17 (25)

The work done in the College then was almost equally divided between General Certificate of Education 'O' Level work and Secretarial courses. Other fields of study, in order of magnitude, were Business Studies, General Certificate of Education 'A' Level work, Nursery Courses, Food Technology, Languages (excluding General Certificate of Education) and Clothing Technology. Much of the work done was therefore of school grade and since about one-third of the students (26) that is about 1,100 came from grammar schools, much of the work was of a remedial nature.

The Report of an inspection in November 1964, by H.M.Inspectors is quite encouraging since it says:- "The growth of the College has been rapid and credit is due to the Principal and his staff for this..... It is satisfactory to record that Monkwearmouth College of Further Education has already much good work behind it. With attention to detail

and continuing effort, the College can become an important Wearside centre for some aspects of Further Education." Among its recommendations were "Now that the Authority has developed its plan for Further Education to the point where the work of each college can be clearly delineated, separate Governing Bodies should be set up with a wider representation from industry and commerce." and to adopt procedures to be more economic in the use of staff and rooms.

The following table of student numbers attending Monkwearmouth College shows an overall expansion since its opening, but it also emphasizes the too great reliance upon Evening Classes.

Student Numbers Attending Monkwearmouth College.

Year	Full-time	Day release	Evening only.
1962-63	405	286	1,916
1963-64	590	492	2,105
1964-65	548	687	2,322
1965-66	576	945	2,184
1966-67	639	743	2,105
1967-68	695	809	1,916
1968-69	562	1,044	1,901

(27)

The high number still attending evening classes as compared to the run down of evening work at West Park shows that day release is not so widely practised among commercial enterprises as it is among engineering and shipbuilding firms. Shipbuilding, Engineering and Construction firms along with the National Coal Board have a tradition of training their employees. In contrast, commercial and clerical training has usually been done in the employees' own time and at his own expense. Another factor has been that since much of this work is done by girls, it is considered uneconomic for a firm to train its female labour force when their future value is more uncertain than that of a young man. No doubt the future development of Training Boards for the industries that Monkwearmouth College caters for will bring about an increase in Day Release and full-time attendance, with a corresponding decline in vocational evening classes, as occurred at the West Park College.

It can be seen that since its conception, the College has fulfilled a need in the town, especially in remedial work up to 'A' Level standards. The raising of the school leaving age and the extension of end on courses in the schools could have serious repercussions on the work of the College. But with the increase in Day Release, implementation of some of the recommendations of the Newsom Report, and the continuing

expansion of all forms of further education, the Monkwearmouth College of Further Education will have an increasingly important role to play, along with its sister College, West Park, in the Further Education organisation of Sunderland.

Chapter 12.

Sunderland Technical College 4.

After Robbins 1963

The period just before the publishing of the Robbins Report on Higher Education in 1963, was one of great uncertainty for the Sunderland Technical College. One of its worries had been partially alleviated when the Town Clerk of Sunderland received a letter on the 19th. June 1962, which said..."Sunderland Technical College is to be affiliated to the University of Newcastle-upon-Tyne on the same conditions as it was to the University of Durham." Other developments were planned, concerning a possible merger with the Rutherford College of Technology to form a combined College of Advanced Technology. Consent was given at the Governors' meeting of the 19th.March 1963, for a powerful body of influential representatives to meet an equivalent body from the Rutherford College Governors to discuss this proposal without prejudice. However, there was no need to proceed with this scheme, after the Government's reaction to the recommendations of the Robbins Report. This was a turning point in the history of the College. With its strong emphasis on advanced courses and research work, it now had the opportunity to develop these fully, whilst

the establishment of the Council for National Academic Awards gave the College the opportunity so long denied it, of being able to plan its own courses for degrees of national recognition. The College's Diplomas in Technology, widely recognised by Industry and Professional Institutions,now could receive the degree status their high standards deserved. Most heartening to the L.E.A., who wished to keep some control over its Technical College, was the Administrative Memorandum 7/65 , which repeated the main points of a speech, made by the Secretary of State for Education and Science, at Woolwich Polytechnic on the 27th.April 1965. This speech had amplified his statement of the 25th.March 1965, in the House of Commons, in which he emphasized that the Government had adopted a policy of duality in Further Education. It (the Government) saw Regional Colleges and other Technical Colleges engaged in advanced work, not as Institutions inferior in status to Universities, but as a separate part of an education system offering disciplines and modes of study which were not catered for in existing Universities. The continued separate existence of Regional Colleges would fill the increasing demand for profession oriented courses, for sandwich courses and for courses in subjects not provided within the University system; e.g. business studies and kindred fields. These Colleges would also be essential to

meet the needs of part-time students. Also, further investigation was to take place on the future of Technical Colleges, particular into the part they might play in the training of teachers. As a result of this, the Department of Education and Science invited five Authorities to set up teacher training departments in their Technical Colleges, and Sunderland was one of these. The Governors gave their consent on the 31st.May 1966, and the initial steps were taken to provide accommodation and staff for a Department of Education. Old buildings were altered, and the training of 100 students commenced in September 1967, with a Head of Department and a full-time tutorial staff of 11. In September 1969, there is a staff of 35, approximately 360 students, and new buildings well under construction alongside the main premises of the Polytechnic. The students are able to make use of the many facilities that the Polytechnic has to offer, as well as belonging to the Institute of Education of the University of Durham.

At the Governors' meeting of the 31st.May 1966, reference was also made to circular 8/66 from the Department of Education and Science, relating to a White Paper "A Plan for Polytechnics and other Colleges", presented to Parliament on the 24th.May 1966. One of the objects of this White Paper was to provide some rationalization, to make more effective

use of resources of staff, equipment, and accommodation of the 250 or so Technical Colleges, engaged in advanced work, full-time and part-time. About 60 Technical Colleges, Colleges of Art, Commerce and Building, were to be combined into 30 Polytechnics, and virtually all advanced work outside the Universities was to be concentrated in these institutions. The Governors' request to re-combine the Sunderland Art College and Technical College was successful and the Sunderland Polytechnic was born in 1969.

What of the future? At present, there are over 1,500 students in the two Colleges following full-time and sandwich courses leading to degrees and diplomas in Art, Business studies, Science and Technology. This is expected to grow quickly to a Polytechnic community of over 2,000 students, plus part-time, evening and special advanced short course students. The inclusion of Art, Science and Technology into one organisation should lead to an environment conducive to the provision of inter-disciplinary courses e.g. industrial engineering design. The Polytechnic should expand its links with industry, especially local industry. The activities of the Industrial Liaison Service whose aims are :-

"1) To promote in local industry an appreciation of the value of technological innovation.

2) To encourage the maximum use of the education and advisory facilities of the Polytechnic and of other local and

national scientific and technological organisations." (1), should be of value to established firms and to those being encouraged to develop within the North-East. In the 1969 Prospectus, it states "The activities of our Industrial Liaison Service and Low Cost Automation Centre in assisting firms in the region with the solution of their problems, will grow, and we anticipate the growth of research work which is sponsored by, and linked with, the needs of industry. There is the possibility of providing a teachers' centre, where school teachers may obtain guidance on developments in teaching methods and in educational technology." At present more than 100 staff and post-graduate students for the degrees of M.Sc., M.Phil., and Ph.D. are engaged in work of research. Many of the problems being investigated have direct application to industrial processes and techniques, especially in the fields of Pharmacy, Mining , Naval Architecture and Building.

Thus, the College is having an impact, as an educational force at Local and National Levels, far greater than its founders would have ever dreamed possible.

General conclusions that can be drawn about the development of Higher and Further Education in Sunderland since 1908 are as follows. First, a great admiration for the drive and tenacity of a few men of vision, such as Councillor Roche and Dr. Gordon Bell, who pushed through their plans for

providing a Technical College and a Day Training College against much opposition. One also wonders at the wide range of interests and capabilities of these professional men. For example, Dr.Gordon Bell tended his medical practise, was a Councillor, Chairman of the Governors of both the Technical College and the Day Training College, acted as honorary Medical adviser to the Training College, kept records of the students' health, weight, height, chest measurements etc., marked the scripts of Apprentices' scholarship examinations and even attended lectures at the Colleges. It is, however, a great pity that their plans were thwarted and stunted by frugal economies which, with the knowledge of hind sight have since proved so expensive.

At the present time, the Art College, Technical College and College of Education are all situated in a variety of modern and nineteenth century buildings scattered over a considerable area. The College of Education, in particular, has buildings separated by distances of about one mile, when a little more decisive drive before 1914, could have seen it built in its own grounds with playing fields and land for future expansion. Likewise, 22 years were taken to provide the facilities to enable the Technical College to be recognised for affiliation to the University of Durham, and Sunderland always lagged behind the Colleges at Newcastle,

which have developed into the University of Newcastle. Finally, the last decade has seen a great change in policy at both national and local levels and all forms of education in Sunderland have benefited. They have been provided with additional accommodation, extra staff and generously equipped, so that they should be able to play a useful part in the educational system of the town and nation.

A suitable answer to the question as to the future development of Higher and Further Education can be taken from the ideas put forward in the epilogue to the book, A History of Adult Education in Great Britain by Thomas Kelly. "Higher and Further Education must continue to adjust themselves to the changing environments and have three main tasks. The first is to continue and extend the present provision of higher education. The second task is to make much more effective provision for that still substantial group of people who for various reasons, have failed to secure the education to which their abilities entitle them. Finally, there is the task of bringing interest and enlightenment, at however humble a level, to the great multitude who have so far remained untouched by the existing facilities."

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LIST OF APPENDICES.

APPENDIX 1

Statistics relating to Sunderland.

TABLE A

EXPORTS OTHER THAN COAL SINCE 1906.

EXPORTS.

Year	Bottles & Glass	Iron and Steel	Machinery	Pitch and Tar	Creosote Oil	Petroleum & Benzole	Boxings	Binder Twine	Paper	Pit Props	Sundries	TOTAL
	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
1906	4,031	8,193	27,965	18,231	3,255	.....	.....	.....	.....	.....	4,290	65,965
1907	4,394	7,146	26,132	15,882	10,165	.....	.....	.....	.....	.....	4,741	68,460
1908	3,127	7,128	10,292	20,524	5,347	.....	.....	.....	.....	.....	4,385	50,803
1909	3,522	6,672	11,454	20,407	13,510	.....	.....	.....	.....	.....	2,154	57,719
1910	3,469	8,336	13,956	16,019	16,064	.....	.....	.....	.....	.....	767	58,611
1911	3,412	7,000	23,289	18,694	9,640	.....	.....	.....	.....	.....	470	62,505
1912	3,395	7,121	23,068	20,442	16,215	.....	.....	.....	.....	.....	1,080	71,321
1913	3,442	7,228	22,635	20,720	13,582	.....	.....	.....	.....	.....	989	68,596
1914	3,205	7,335	18,610	15,804	14,491	.....	.....	.....	.....	.....	918	60,363
1915	1,782	7,963	11,844	12,522	10,833	.....	.....	.....	.....	.....	72	45,016
1916	1,583	5,613	9,586	14,895	11,106	.....	.....	.....	.....	.....	70	42,853
1917	1,161	936	16,587	20,398	5,524	.....	.....	.....	.....	.....	62	44,668
1918	.....	.....	23,232	7,621	1,118	.....	.....	.....	.....	.....	.....	31,971
1919	.....	354	20,531	11,599	2,506	3,632	.....	.....	.....	.....	.....	38,622
1920	.....	.....	17,700	2,658	2,468	4,396	.....	.....	.....	.....	129	27,351
1921	.....	.....	11,927	10,662	3,605	5,253	373	.....	.....	.....	118	31,338
1922	290	1,367	9,998	8,660	4,122	2,033	1,641	1,665	865	.....	.....	30,641
1923	126	877	3,330	5,221	8,022	2,004	1,164	1,539	938	.....	440	23,661
1924	358	227	14,269	2,754	6,553	24	1,629	2,525	2,096	.....	148	30,583
1925	389	456	7,050	9,149	4,002	530	3,593	2,037	1,000	.....	2,005	30,211
1926	202	2,053	4,111	10,533	2,503	1,608	2,989	1,426	691	.....	950	27,066
1927	158	5,204	13,329	3,900	7,465	2,143	653	2,080	.....	402	789	36,123
1928	196	3,228	18,780	3,599	4,502	20,743	175	1,370	574	2,101	301	55,569
1929	266	4,644	14,700	2,592	2,770	22,108	.....	1,462	2,525	2,081	1,630	54,778
1930	817	3,183	16,366	17,401	10,148	27,080	193	1,376	1,849	3,161	1,916	83,990
1931	792	2,853	3,191	21,470	3,015	24,108	.....	1,231	2,322	2,648	971	62,601
1932	531	1,518	1,059	11,335	6,229	18,353	.....	1,225	1,775	5,070	2,004	49,099
1933	338	1,783	1,432	10,864	3,335	14,041	.....	2,006	1,608	6,287	691	42,385
1934	125	696	2,029	15,516	5,987	9,621	.....	2,048	642	6,559	970	44,193
1935	.....	.....	3,077	10,671	5,236	17,218	.....	1,877	.....	5,631	685	44,395
1936	23	2,380	11,079	5,744	2,394	20,185	Grain	1,583	376	5,806	1,366	50,936
1937	18	10,332	11,456	17,562	6,268	25,352		1,506	404	5,403	771	79,072
1938	52	5,601	12,211	16,325	5,302	26,108	.....	1,586	367	5,105	1,839	74,496
1939	156	7,115	8,811	7,935	3,177	15,046	.....	1,789	170	5,385	956	50,540
1940	1	91	15,440	11,974	501	12,206	6,970	636	.....	.....	945	48,764
	Timber											
1941	.....	.....	17,690	1,006	.....	580	2,285	.....	.....	.....	23,999	45,560
1942	2,988	.....	17,785	3,211	.....	6,634	3,247	.....	.....	.....	52,998	86,863
1943	.....	.....	18,740	8,791	.....	8,202	1,773	.....	.....	.....	65,574	103,080
1944	155	.....	14,417	.....	.....	10,630	4,256	.....	.....	.....	135,218	164,676
1945	.....	.....	15,817	3,937	.....	13,692	2,759	.....	.....	.....	236,304	272,509
1946	754	.....	12,525	7,322	499	14,212	742	.....	.....	.....	40,559	76,613
1947	.....	110	8,469	8,832	3,001	21,227	1,046	.....	.....	.....	10,139	52,824

TABLE 13

Returns shewing the Imports and Exports, other than Coal, from the year 1906.

IMPORTS.

Year	Timber	Props	Iron & Steel	Iron Ore	Grain	Esparto	Sugar	Petroleum in bulk	Cement	Wood Pulp	Sundries	TOTAL
	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
1906	79,580	42,373	16,754	74,041	31,799	16,238	.....	10,690	.....	3,340	61.257	336,072
1907	74,344	30,439	8,076	66,477	27,653	21,078	.....	22,644	.....	2,769	48.723	301,583
1908	49,023	42,279	4,414	44,887	33,351	18,719	.....	25,748	.....	5,634	43,882	267,937
1909	50,374	39,450	5,989	34,690	39,634	28,757	.....	22,531	.....	2,165	44,072	267,662
1910	71,373	46,844	6,875	48,052	37,810	15,976	.....	25,206	.....	10	38,571	290.717
1911	55,738	38,137	8,817	70,252	54,180	18,072	.....	26,826	4,889	1,244	42,472	320.627
1912	77,119	36,447	8,232	124,279	57,249	20,305	.....	41,259	3,045	1,211	35,236	404,382
1913	54,673	41,091	9,158	139,971	70,245	19,957	.....	42,616	3,036	977	35,248	416,972
1914	42,905	41,366	3,444	67,348	46,090	18,043	.....	37,947	2,839	818	31,270	302,070
1915	23,516	38,039	1,288	55,057	36,692	14,426	.....	26,927	2,959	3,617	14,240	216,761
1916	20,589	39,606	995	72,330	40,605	18,176	.....	17,896	3,123	3,453	9,597	226,370
1917	19,449	12,436	1,032	79,465	26,430	3,338	.....	11,329	3,649	247	3,697	161,072
1918	10,895	4,079	3,851	68,809	31,688	1,056	.....	7,063	3,120	.....	3,083	133,644
1919	33,834	35,000	2,684	100,966	20,293	10,056	.....	24,288	3,129	5,819	5,011	241,080
1920	31,715	19,702	3,623	224,403	43,757	17,509	.....	28,527	6,720	11,353	14,554	401,863
1921	14,745	22,585	818	59,815	36,895	5,717	.....	36,848	3,775	1,307	8,955	191,461
1922	29,306	40,242	398	23,824	28,431	17,414	.....	26,931	5,348	3,442	15,983	191,319
1923	25,959	75,918	360	26,607	37,557	19,721	.....	34,376	9,408	2,871	17,846	250,623
1924	48,588	54,756	1,099	51,284	29,612	20,488	.....	45,625	13,052	3,137	28,038	295,679
1925	26,210	45,772	2,457	67,530	28,281	22,400	.....	43,360	13,586	3,828	20,640	274,064
1926	22,217	30,655	15	15,728	26,340	18,500	.....	54,882	9,438	1,188	70,937	249,900
1927	30,497	33,156	8,162	109.841	21,303	24,783	.....	69,125	15,211	3,198	53,795	369,071
1928	30,853	68,914	7,529	133,970	22,420	26,011	.....	73,405	12,403	4,656	39,886	420,047
1929	33,934	81,118	16,662	57,384	25,813	20,811	.....	88,001	13,061	6,176	44,628	387,588
1930	30,765	75,633	14,227	79,754	10,427	16,978	.....	86,371	15,023	5,562	43,391	378,131
1931	15,591	61,730	7,330	17,085	10,121	18,602	.....	87,620	21,923	3,775	68,168	311,945
1932	17,520	71,891	2,974	6,602	5,245	19,370	.....	65,648	17,060	5,447	60,602	272,359
1933	19,804	84,573	79	9,627	14,620	20,259	.....	79,373	17,102	9,413	41,447	296,297
1934	27,007	104,680	251	34,725	11,135	21,473	.....	80,145	17,268	5,036	30,618	332,338
1935	21,641	111,029	877	39,887	10,766	23,888	.....	90,743	17,868	6,674	28,696	352,069
1936	28,065	71,482	3,879	52.227	15,495	24,680	.....	74,441	18,416	6,715	36,210	331,610
1937	27,336	95,922	5,529	122,836	20,599	24,952	.....	80,295	21,726	7,199	41,034	447,428
1938	18,102	62,040	2,943	54,318	11,859	23,007	.....	79,332	35,460	5,646	32,824	325,531
1939	24,146	56,452	913	27,001	584	17,821	.....	54,589	35,777	7,736	27,084	252,103
1940	12,749	26,321	2,568	17,075	18,344	903	.....	11,550	32,409	1,009	8,762	131,690
						Flour						
1941	5,097	8,090	1,799	7,396	11,743	9,574	.....	14,292	15,037	.....	7,361	80,389
1942	8,205	1,000	6,987	13,696	3,247	3,658	5,922	21,630	12,800	.....	12,841	89,986
1943	17,053	892	10,041	33,680	13,226	.....	3,953	14,617	10,761	.....	12,768	116,991
1944	159	.....	1,107	25,447	11,566	344	2,328	11,502	3,370	.....	62,425	118,248
1945	8,923	14,283	.....	6,691	13,087	2,300	1,969	14,543	.....	1,879	15,314	78,989
1946	7,309	28,486	.....	82,942	6,690	ESPARTO	3,443	39,123	22,307	699	28,646	219,645
1947	30,452	31,945	.....	144,589	13,616	6,198	5,485	90,317	40,010	1,750	42,695	406,977

Returns, shewing the Imports and Exports other than coal from the year 1927

IMPORTS

Year	Timber	Props	Iron & Steel	Iron Ore	Grain	Esparto	Iron & Steel Scrap	Petroleum in bulk	Cement	Wood Pulp	Sundries	TOTAL
	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
1927	30,497	33,156	8,162	109,841	21,303	24,783	.....	69,125	15,211	3,198	53,795	369,071
1928	30,853	68,914	7,529	133,970	22,420	26,011	.....	73,405	12,403	4,656	39,886	420,047
1929	33,934	81,118	16,662	57,384	25,813	20,811	.....	88,001	13,061	6,176	44,628	387,588
1930	30,765	75,633	14,227	79,754	10,427	16,978	.....	86,371	15,023	5,562	43,391	378,131
1931	15,591	61,730	7,330	17,085	10,121	18,602	.....	87,620	21,923	3,775	68,168	311,945
1932	17,520	71,891	2,974	6,602	5,245	19,370	.....	65,648	17,060	5,447	60,602	272,359
1933	19,804	84,573	79	9,627	14,620	20,259	.....	79,373	17,102	9,413	41,447	296,297
1934	27,007	104,680	251	34,725	11,135	21,473	.....	80,145	17,268	5,036	30,618	332,338
1935	21,641	111,029	877	39,887	10,766	23,888	.....	90,743	17,868	6,674	28,696	352,069
1936	28,065	71,482	3,879	52,227	15,495	24,680	.....	74,441	18,416	6,715	36,210	331,610
1937	27,336	95,922	5,529	122,836	20,599	24,952	.....	80,295	21,726	7,199	41,034	447,428
1938	18,102	62,040	2,943	54,318	11,859	23,007	6,901	79,332	35,460	5,646	25,923	325,531
1939	24,146	56,452	913	27,001	584	17,821	531	54,589	35,777	7,736	26,553	252,103
1940	12,749	26,321	2,568	17,075	18,344	903	.....	11,550	32,409	1,009	8,762	131,690
						Flour						
1941	5,097	8,090	1,799	7,396	11,743	9,574	1,525	14,292	15,037	.....	5,836	80,389
1942	8,205	1,000	6,987	13,696	3,247	3,658	5,502	21,630	12,800	.....	13,261	89,986
1943	17,053	892	10,041	33,680	13,226	.....	.....	14,617	10,761	.....	16,721	116,991
1944	159	.....	1,107	25,447	11,566	344	.....	11,502	3,370	.....	64,753	118,248
1945	8,923	14,283	.....	6,691	13,087	2,300	.....	14,543	.....	1,879	17,283	78,989
1946	7,309	28,486	.....	82,942	6,690	Esparto	2,803	39,123	22,307	699	29,286	219,645
1947	30,452	31,945	.....	144,509	13,616	6,198	6,144	90,317	40,010	1,750	42,036	406,977
1948	22,803	17,682	.....	178,844	29,045	16,203	1,158	85,829	17,204	2,894	36,089	407,751
1949	12,191	35,930	.....	129,099	19,232	15,875	15,083	119,101	22,301	2,293	46,183	417,288
1950	3,377	17,942	.....	121,086	10,827	15,648	47,794	136,801	20,605	2,813	52,193	429,086
1951	6,938	19,547	.....	182,391	26,476	14,039	10,215	169,641	35,479	3,885	44,136	512,747
1952	2,528	39,065	.....	227,854	13,152	10,331	2,485	174,913	54,803	4,726	33,469	563,326
1953	3,681	18,256	.....	211,810	18,961	12,039	1,769	182,862	69,162	4,723	35,937	559,200
1954	9,741	16,605	.....	.....	.....	14,322	11,479	172,071	63,900	6,700	36,144	330,962
1955	13,732	8,716	23,740	.....	.....	14,111	200,761	178,523	54,652	6,634	107,279	608,148
1956	12,827	11,433	5,051	.....	.....	6,869	214,769	194,769	52,293	6,074	72,579	576,664
1957	12,223	14,613	3,904	.....	.....	10,584	177,557	169,252	52,370	6,336	50,193	497,032
1958	6,953	1,558	2,750	.....	.....	8,503	11,383	185,807	50,434	9,959	48,062	325,409
1959	8,575	2,894	.....	.....	.....	11,629	.....	216,561	53,900	7,109	43,609	344,277
1960	8,898	10,303	.....	.....	.....	9,476	39,936	274,973	57,409	8,070	40,818	449,883
1961	7,191	8,112	.....	.....	.....	12,574	9,939	311,158	100,893	10,263	42,836	502,966
1962	5,206	8,652	.....	.....	.....	11,821	.....	371,720	99,489	9,090	48,156	554,134
1963	4,254	7,993	.....	.....	.....	11,323	.....	275,247	83,829	5,076	46,728	434,450
1964	5,935	6,791	6,420	.....	.....	6,148	.....	264,828	109,016	3,817	46,177	449,132
1965	9,635	8,101	10,504	.....	.....	3,986	.....	327,397	88,190	5,870	54,282	507,965
1966	10,824	7,163	4,462	.....	.....	221	.....	305,014	.....	13,060	57,956	398.700
1967	8,320	4,693	1,711	.....	.....	.....	.....	340,857	.....	12,165	65,217	432,963
1968	11,152	.....	566	.....	.....	.....	.....	341,309	.....	11,074	70,231	434,332

TABLE D

EXPORTS OTHER THAN COAL FROM 1927

EXPORTS

Year	Bottles & Glass	Iron and Steel	Machinery	Pitch and Tar	Creosote Oil	Petroleum & Benzole	Boxings	Binder Twine	Paper	Pit Props	Sundries	TOTAL
	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons
1927	158	5,204	13,329	3,900	7,465	2,143	653	2,080	.....	402	789	36,123
1928	196	3,228	18,780	3,599	4,502	20,743	175	1,370	574	2,101	301	55,569
1929	266	4,644	14,700	2,592	2,770	22,108	.....	1,462	2,525	2,081	1,630	54,778
1930	817	3,183	16,866	17,401	10,148	27,080	193	1,376	1,849	3,161	1,916	83 990
1931	792	2,853	3,191	21,470	3,015	24,108	.....	1,231	2,322	2,648	971	62 601
1932	531	1,518	1,059	11,335	6,229	18,353	.....	1,225	1,775	5,070	2,004	49 099
1933	338	1,783	1,432	10,864	3,335	14,041	.....	2,006	1,608	6,287	691	42,385
1934	125	696	2,029	15,516	5,987	9,621	.....	2,048	642	6,559	970	44,193
1935	.....	.....	3,077	10,671	5,236	17,218	.....	1,877	.....	5,631	685	44,395
1936	23	2,380	11,079	5,744	2,394	20,185	.....	1,583	376	5,806	1,366	50,936
1937	18	10,332	11,456	17,562	6,268	25,352	Grain	1,506	404	5,403	771	79,072
1938	52	5,601	12,211	16,325	5,302	26,108	.....	1,586	367	5,105	1,839	74 496
1939	156	7,115	8,811	7,935	3,177	15,046	.....	1,789	170	5,385	956	50 540
1940	1	91	15,440	11,974	501	12,206	6,970	636	.....	.....	945	48,764
1941	.....	.....	17,690	1,006	.....	580	2,285	.....	.....	.....	23,999	45,560
	Timber									Lime-stone		
1942	2,988	.....	17,785	3,211	.....	6,634	3,247	.....	.....	.....	52,998	86,863
1943	.....	.....	18,740	8,791	.....	8,202	1,773	.....	.....	.....	65,574	103,080
1944	155	.....	14,417	.....	.....	10,630	4,256	.....	.....	.....	135,218	164,676
1945	.....	.....	15,817	3,937	.....	13,692	2,759	.....	.....	.....	236,304	272,509
1946	754	.....	12,525	7,322	499	14,212	742	.....	.....	.....	40,559	76,613
1947	.....	110	8,469	8,832	3,001	21,227	1,046	.....	.....	.....	10,139	52,824
1948	.....	62	12,892	5,230	2,496	18,623	11,779	.....	.....	.....	10,549	61,631
1949	.....	.....	10,903	6,791	2,998	22,987	4,916	.....	.....	.....	8,756	57,351
1950	.....	.....	11,118	3,177	.....	47,145	8,774	.....	.....	.....	5,515	75,729
1951	.....	.....	8,179	.....	.....	74,513	6,623	.....	.....	.....	10.413	99,728
1952	.....	.....	9,324	.....	.....	61,838	7,214	.....	.....	.....	11,908	90,284
1953	.....	.....	12,494	.....	.....	53,172	1,090	.....	.....	.....	9,356	76,112
1954	.....	.....	9,864	.....	.....	38,477	7,544	.....	.....	.....	7,527	63,412
1955	.....	.....	12,519	.....	.....	46,233	.....	.....	Iron & Steel Scrap	.....	2,966	61,718
1956	.....	.....	13,131	.....	.....	41,216	.....	.....		.....	1,915	56,262
1957	.....	.....	13,093	.....	.....	40,516	.....	.....		3,401	1,778	58,788
1958	.....	.....	15,707	.....	.....	38,664	.....	.....	1,941	19,449	985	76,746
1959	.....	.....	15,053	.....	.....	27,356	.....	446	2,674	23,111	4,988	73,628
1960	.....	.....	12,067	.....	.....	23,496	.....	.....	.....	16,249	3,162	54,974
1961	.....	.....	15,415	.....	.....	22,850	.....	.....	.....	23,487	1,865	63,617
1962	.....	.....	12,383	.....	.....	24,229	.....	.....	1,662	29,885	1,888	70,047
1963	.....	.....	14,228	.....	.....	31,893	.....	.....	241	3,125	151	49,638
1964	.....	.....	8,606	.....	.....	17,193	.....	.....	1,880	.....	3,256	30,935
1965	.....	.....	14,365	.....	.....	23,124	.....	.....	488	.....	3,378	41,355
1966	.....	.....	14,873	.....	.....	15,843	.....	.....	28,993	8,184	633	68,526
1967	.....	.....	17,796	.....	.....	22,062	.....	.....	126,617	760	36	167.271
1968			10.128			16376			37 667	2,671	335	67,177

TABLE E

Return shewing in tons the quantity of Coal, Coke etc. shipped in the Port of Sunderland since the year 1848

		Total		River Wear	Nth. Dock	South Docks	Total
		Tons		Tons	Tons	Tons	Tons
Year ending 31st December,	1848	1,662,695	1908	2,381,186	2,811	1,851,370	4,235,367
,, ,,	1849	1,519,354	1909	2,591,614	358	1,874,199	4,466,171
,, ,,	† 1850	1,718,427	1910	2,712,636	10	1,579,340	4,291,986
,, ,,	1851	1,643,024	1911	2,959,578	29	1,863,758	4,823,365
,, ,,	1852	1,789,795	§ 1912	2,683,464	..	1,769,798	4,453,262
,, ,,	1853	1,838,867	1913	2,897,841	30	1,959,790	4,857,661
,, ,,	1854	1,871,353	¶ 1914	2,423,852	9	1,650,728	4,074,589
,, ,,	1855	1,890,926	¶ 1915	2,055,721	..	1,449,661	3,505,382
,, ,,	‖ 1856	2,204,898	¶ 1916	1,887,152	..	1,257,033	3,144,185
,, ,,	1857	2,483,116	¶ 1917	1,286,302	..	815,075	2,101,377
,, ,,	1858	2,560,104	¶ 1918	1,201,025	..	861,036	2,062,061
,, ,,	‡ 1859	2,606,513	1919	1,899,714	..	821,711	2,721,425
,, ,,	1860	2,979,468	1920	2,066,866	..	1,219,610	3,286,476
,, ,,	1861	3,108,462	§ 1921	1,676,847	..	1,325,024	3,001,871
,, ,,	1862	3,151,027	1922	2,729,009	..	2,351,785	5,080,794
,, ,,	1863	3,081,166	1923	2,875,424	..	2,516,075	5,391,499
,, ,,	1864	3,013,001	1924	2,864,616	..	2,362,591	5,227,207
,, ,,	1865	3,035,921	1925	2,583,574	..	2,491,716	5,075,290
,, ,,	1866	2,982,983	§ 1926	1,097,167	..	1,072,113	2,169,280
,, ,,	1867	3,130,794	1927	2,914,141		2,584,038	5,498,179
,, ,,	1868	3,197,879	1928	3,222,193	S'land	2,171,314	5,393,507
,, ,,	1869	3,074,705	1929	3,219,375	Corpora-	1,946,472	5,165,847
,, ,,	1870	3,227,127	1930	2,696,707	tion	2,140,702	4,837,409
,, ,,	1871	3,380,860	1931	2,391,842	Quay	2,513,708	4,905,550
,, ,,	1872	3,128,880	1932	2,233,760		2,299,022	4,532,782
,, ,,	1873	2,952,538	1933	2,261,182	Tons	1,814,367	4,075,549
,, ,,	1874	2,924,660	1934	2,398,308	1,923	1,595,582	3,995,813
,, ,,	1875	3,298,071	1935	2,281,573	14,072	1,518,886	3,814,531
,, ,,	1876	3,440,460	1936	2,423,982	13,325	1,575,982	4,013,289
,, ,,	1877	3,409,944	1937	2,619,575	31,400	2,203,977	4,854,952
,, ,,	1878	3,349,150	1938	2,485,016	21,849	1,942,854	4,449,719
,, ,,	1879	3,276,744	¶ 1939	2,247,737	23,094	2,035,140	4,305,971
,, ,,	1880	3,573,483	¶ 1940	1,200,572	26,595	1,515,933	2,743,100
,, ,,	1881	3,604,325	¶ 1941	1,153,517	34,338	980,228	2,168,083
,, ,,	1882	3,700,240	¶ 1942	1,360,328	25,707	1,005,770	2,391,805
,, ,,	1883	3,958,564	¶ 1943	1,307,822	18,538	763,675	2,090,035
,, ,,	1884	3,789,481	¶ 1944	1,292,690	8,122	808,004	2,108,816
,, ,,	1885	3,981,700	¶ 1945	1,323,578	12,171	807,610	2,143,359
,, ,,	1886	3,945,434	1946	1,455,258	18,322	831,306	2,304,886
,, ,,	1887	4,261,292	1947	1,452,874	17,015	1,021,980	2,491,869
,, ,,	1888	4,190,726	1948	1,515,228	14,075	1,261,390	2,790,693
,, ,,	1889	4,122,509	1949	1,683,232	8,850	1,253,137	2,945,219
,, ,,	1890	3,740,330	1950	1,681,268	11,109	1,339,296	3,031,673
,, ,,	1891	3,792,222	1951	1,864,809	17,970	1,162,925	3,045,704
,, ,,	1892	3,127,587	1952	1,916,294	43,817	1,226,594	3,186,705
,, ,,	1893	4,031,025	1953	1,892,120	10,325	1,355,738	3,258,183
,, ,,	1894	4,402,807	1954	2,008,652	7,320	1,242,714	3,258,686
,, ,,	1895	4,226,382	1955	1,852,190	6,162	1,031,249	2,889,601
,, ,,	1896	4,406,856	1956	1,846,041	1,008	1,029,465	2,876,514
,, ,,	1897	4,408,901	1957	1,642,554	..	925,505	2,568,059
,, ,,	1898	4,502,755	1958	1,461,044	..	856,989	2,318,033
,, ,,	1899	4,341,050	1959	1,333,277	..	864,586	2,197,863
,, ,,	1900	4,262,095	1960	1,098,916	..	1,110,667	2,209,583
,, ,,	1901	4,257,337	1961	1,115,851	..	1,020,154	2,136,005
,, ,,	1902	4,479,596	1962	1,183,225	..	1,471,742	2,654,967
,, ,,	1903	4,741,484	1963	1,524,400	..	1,883,814	3,408,214
,, ,,	1904	5,117,230	1964	1,385,439	..	1,135,651	2,521,090
,, ,,	1905	4,924,077	1965	1,347,361	..	841,058	2,188,419
,, ,,	1906	4,276,881	1966	1,095,788	..	891,225	1,987,013
,, ,,	1907	4,396,932	1967	949,844	..	1,045,820	1,995,664
			1968	620,146	..	1,524,997	2,145,143

North Dock opened 1840. † South Docks opened. ‖ South Outlet opened.
‡ South Docks acquired by the River Wear Commissioners, July, 1859. § Miners' Strike.
¶ European War.

TABLE F.

Return shewing the yearly tonnage of the Port of Sunderland since 1908

Year	Coastwise		Foreign		Total	
	Vessels	Reg. Tons	Vessels	Reg. Tons	Vessels	Reg. Tons
1908	2,651	943,248	1,397	1,244,206	4,048	2,187,454
1909	2,747	991,974	1,375	1,324,315	4,122	2,316,289
1910	2,614	1,032,395	1,288	1,259,857	3,902	2,292,252
1911	2,670	1,110,000	1,355	1,402,067	4,025	2,512,067
1912	2,317	1,004,126	1,416	1,427,499	3,733	2,431,625
1913	2,258	1,082,512	1,517	1,538,069	3,775	2,620,581
1914	1,970	987,190	1,193	1,247,055	3,163	2,234,245
1915	1,494	718,691	1,180	1,049,744	2,674	1,768,435
1916	1,257	695,167	1,093	963,210	2,350	1,658,377
1917	951	594,395	672	552,308	1,623	1,146,703
1918	534	382,464	786	726,531	1,320	1,108,995
1919	994	734,746	1,098	855,106	2,092	1,589,852
1920	1,844	1,156,069	943	825,470	2,787	1,981,539
1921	1,546	834,440	866	778,429	2,412	1,612,869
* 1922	1,967	1,032,859	1,419	1,386,850	3,386	2,419,709
1923	1,927	980,064	1,510	1,497,883	3,437	2,477,947
1924	2,050	1,099,865	1,275	1,334,766	3,325	2,434,631
1925	1,935	1,033,107	1,157	1,326,222	3,092	2,359,329
1926	1,019	567,314	541	622,609	1,560	1,189,923
1927	1,768	1,053,319	1,248	1,489,868	3,016	2,543,187
1928	2,022	1,324,321	1,160	1,306,038	3,182	2,630,359
1929	2,069	1,281,750	1,152	1,238,578	3,221	2,520,328
1930	1,948	1,150,476	1,037	1,258,688	2,985	2,409,164
1931	1,905	1,061,800	1,061	1,305,777	2,966	2,367,577
1932	1,657	956,015	933	1,217,002	2,590	2,173,017
1933	1,771	1,036,134	773	972,857	2,544	2,008,991
1934	1,789	1,019,511	776	942,188	2,565	1,961,699
1935	1,861	1,053,361	703	796,387	2,564	1,849,748
1936	2,053	1,129,879	786	855,306	2,839	1,985,185
1937	2,384	1,373,762	908	993,712	3,292	2,367,474
1938	2,071	1,188,664	894	1,071,580	2,965	2,260,244
1939	1,866	1,049,696	831	1,025,062	2,697	2,074,758
1940	1,256	907,445	285	461,406	1,541	1,368,851
1941	1,323	1,061,270	98	260,717	1,421	1,321,987
1942	1,794	1,340,191	80	280,895	1,874	1,621,086
1943	1,457	1,043,530	79	275,199	1,536	1,318,729
1944	1,443	1,097,772	78	312,624	1,521	1,410,396
1945	1,457	990,590	182	418,231	1,639	1,408,821
1946	1,633	1,026,532	189	301,712	1,822	1,328,244
1947	1,938	1,169,383	225	281,409	2,163	1,450,792
1948	1,699	1,067,067	460	514,914	2,159	1,581,981
1949	1,870	1,191,131	498	504,720	2,368	1,695,851
1950	1,894	1,279,161	533	550,475	2,427	1,829,636
1951	1,899	1,308,940	509	544,588	2,408	1,853,528
1952	1,876	1,306,499	614	690,365	2,490	1,996,864
1953	1,801	1,213,443	621	715,970	2,422	1,929,413
1954	1,708	1,324,003	526	577,170	2,234	1,901,173
1955	1,714	1,271,127	491	639,856	2,205	1,910,983
1956	1,794	1,396,533	384	442,775	2,142	1,839,308
1957	1,657	1,238,680	290	386,372	1,947	1,625,052
1958	1,447	1,182,538	256	331,177	1,703	1,513,715
1959	1,309	1,165,369	270	348,527	1,579	1,513,896
1960	1,259	1,087,832	319	439,255	1,578	1,527,087
1961	1,234	1,106,024	334	433,272	1,568	1,539,296
1962	1,391	1,339,238	336	491,155	1,727	1,830,393
1963	1,490	1,647,512	228	395,356	1,718	2,042,868
1964	1,179	1,326,469	230	392,123	1,409	1,718,592
1965	1,170	1,180,761	230	419,774	1,400	1,600,535
1966	917	1,125,522	217	449,942	1,134	1,575,464
1967	925	1,152,418	212	406,165	1,137	1,558,583
1968	858	1,238,087	184	303,979	1,042	1,542,066

* North Dock acquired by the River Wear Commissioners, 4th September, 1922.

SHIP BUILDING ON THE WEAR 1918 – 1938

THE RISE AND FALL OF WEAR'S SHIPBUILDING DURING THE INTER-WAR PERIOD:

SUNDERLAND - POPULATION

Year		
1681	2,490	Sunderland Parish only.
1719	6,000	
1781	20,940	
1801	24,469	
1811	25,205	
1821	30,923	
1831	39,470	Whellan 1894.
1841	51,465	
1851	64,720	
1861	85,797	
1871	104,409	
1881	116,548	
1891	131,686	
1901	146,077	
1911	151,159	Registrar General
1921	159,055	
1931	185,825	
1941	no census.	
1951	181,524	
1961	189,686	
1966	187,650	
1967	219,270	

APPENDIX 11.

Requisites for a Department of Education for Sunderland Technical College. 1908.

To encourage the provision of institutions specially devoted o the training of teachers the Board of Education will make a grant n aid of £25 for each place provided, or 25% of the total cost of he buildings and site, whichever of these two may be the less.

The same aid will be given for the enlargement of an existing ollege.

TRAINING COLLEGE
INCOME & E X P E N D I T U R E.

* * *

The Board of Education pay to each local authority a sum of :10 per student as a contribution to the expense of educating him or ier. In addition £3 per student is paid to the College if science nd drawing are taught in the building. Over and above these college grants the Board pay personal grants of £25 to each male, and £20 to ach female student (payment being made through the college). Out of this the student is able to pay a fee for tuition which varies some what, but is usually £10 or £12.

At present Sunderland students who finish their course as P.T's have to leave home and pay board and lodgings as well as tuition fees.

It will be seen from the statement of income from grants that the cost of the training of teachers is largely a national rather tha a local charge.

Income from grants for 50 students:-

Grant of £10 per student	£500.
Grant of £3 for science & drawing	£150.
Fees at £10 per student	£500.
Total	£1,150.

First Year: 50 students. Secor

Fees .. .. £500. Fe
Grants .. £500. Gr
Grants for Gr
science &
Drawing £150.

Total £1,150.

EXPENDITURE.

* *

PRINCIPAL OF NORMAL DEPARTMENT & LECTURER
Mistress of Method .. .. ..
Lecturer in Latin, English, & Hi
Lecturer in Mathematics for Trai
Asst. for Botany, Geology, & Geo
Art Asst. (take Staurday Brushwo
and assist Mr. Rogers) ..
Teacher of Manual Instruction .
Teacher of Physical Training ..
Repayment of Building Fund & Int
(£3,000 for Training Colleg

The teaching of other subjects necessary (
is assumed to be provided for.

GENERAL CONDITIONS AS TO PR

* * * * *

The Board of Education requires 4 Class-ro
students, and no class-room should hold more than
Lecture-room to contain 50 or 60 students will oft
A class-room should provide at least 18 sq. feet
every student accommodated. It should be furnish

The Board's Architect is willing to confer

APPENDIX 111.

Board of Education Regulations
concerning Bursars and Student Teachers.

Extracts from the Board of Education Regulations for the Preliminary Education of Elementary School Teachers.

CHAPTER VI : Grants in aid of the Education and Maintenance of Bursars

29. A Local Education Authority for Higher or Elementary Education may recommend for recognition as Bursars, Boys or girls who intend to become, in the future, Elementary School teachers and are attending full-time at a Secondary School which is on the list of Secondary Schools Recognised as Efficient, but require assistance in order to render their continuance at school financially possible.

30. The period of recognition of a Bursar will be for one year only....

31. Recognition of a Bursar will be subject to the fulfilment of the following conditions:-

a) The Candidate must be over 16 but not over 18 years of age.

b) A Declaration must have been signed by the candidate and his parent or guardian, and counter signed by the Headmaster or Headmistress of the Secondary School a. that he is not unsuitable to become an Elementary School Teacher b. that his attainments are such that he may be reasonably

expected to pass an examination for admission to a Training College during the course of the year. In the case of a girl, the certificate must show that she is reasonably proficient in needlework. c. The Authority must satisfy the Board that the candidate will be provided during the Bursarship with education free of fees at a Secondary School. f. The candidate must have been receiving continuous instruction in an efficient Secondary School or Schools for the two years immediately before the period of recognition.... and must hold his Bursarship in the school in which the last year of the qualifying period was spent.

33. A Grant of £10 on account of each Bursar will be paid subject to :-

a) The Bursar must have received continuous and suitable instruction.....

b) The Bursar must have passed the Preliminary Examination for the Elementary School Teachers' Certificate.

c) The Bursar must have entered a Training College and signed the Training College Undertaking.

34. A grant of £2 will be paid in aid of general travelling and other incidental expenses.

35. The recognition of a Student Teacher will date from the day on which employment or training in that capacity begins and will ordinarily be for not more than one year, but may be continued for a second year with the approval of the Board.

36. Candidates who have been Bursars may be recognised as Student Teachers at the close of their period of recognition as Bursars.

37. Candidates must :-

a) have been in receipt of continuous instruction for not less than 3 years at Secondary Schools recognised as efficient.

b) be suitable in respect of character, health, free from personal defects and have been vaccinated.

c) be over 17 years of age.

d) have passed the Preliminary Examination for the Elementary School Teachers' Certificate or some other Examination accepted by the Board.

e) have certificates signed by the Headmaster or Headmistress of their Secondary Schools that they are in character and ability fit and proper persons to be teachers in Elementary Schools.

f) make declarations that they desire to become Elementary Schoolteachers.

39. The attendance of a Student Teacher at the Elementary

School whether for the purpose of employment or of training may not exceed eight meetings a week; the Head Teacher of the school must keep registers showing the time spent by the Student Teacher in the School and full records of the manner in which it was employed.

40. a) In addition to the practical training and experience which they obtain in the Elementary School, Student Teachers must obtain such further general education as may be available to the satisfaction of an Inspector of the Board. Their course of study and training must be properly supervised in accordance with the Scheme approved for the area by the Board.

APPENDIX IV.

Call up of Teachers and Students.

1914-18.

Board of Education,

27. 10. 1915.

Education and the present crisis.

"My predecessor, addressing you during the first month of the war, urged upon you the duty of keeping the system of education going. I entirely subscribe to all he said; and looking back now, thirteen months later, I have nothing but admiration for the way in which my colleagues have responded to this call. But the events of these months and, above all, His Majesty's stirring appeal, make it necessary for me now to say something further..... In their nature, education and war are as far apart as poles. Education builds, and war destroys. But there is a time when the man who is building, must leave his work to guard against a calamity which threatens the building itself; when civilisation must curtail its most constructive work to preserve itself from destruction. That time has now come."

17th July, 1916

"The Board will not be able to consent to the admission to Training Colleges this Autumn of any men fit for General Service who reached the age of 17 before 1st May, 1916. The only men candidates who can be regarded as eligible for admission to Training Colleges this autumn will be :-

a) men who are not passed as fit for General Service (Class A) provided that they are over 17 years of age on 1st August, 1916.

b) men who will reach the age of 18 in the months of May, June or July, 1917 whether they are passed as fit for "General Service" or not.

provided in both cases that they have passed one of the ordinary qualifying examinations under Appendix A of the Regulations...."

SIR,

1. The Board of Education have had under their consideration the problems as to the future of the Training Colleges for Men which have arisen from the withdrawal of students for military service. It has been found that most of the men students who entered the Colleges last autumn reached the age for military service, before they were able to complete even their first year of training and so qualify for a Provisional Certificate under the terms of the Board's recent Circulars. It is now evident that, if the war continues, it would be useless for fresh students to enter the Colleges next autumn at the usual age of admission, with the prospect of being able to complete only part of a year's training. Unless, therefore, some special arrangements can be adopted to meet the difficulties caused by the war, there is a likelihood that most of the Colleges for Men that still remain open may have to be closed after the summer.

2. It has been suggested that a remedy might be found by lowering the ordinary age of admission for men students during the period of the war so as to enable students to enter College between 17 and 18, instead of between 18 and 19 as is at present usual.

3. The proposed course is no doubt open to some objections. The Board believe that experience shows that students can, generally speaking, profit more by their course of training if they enter College when over the age of 18 than if they enter a year earlier. Moreover, admission to the Colleges at the age of 17 involves the abandonment of the year of Student Teachership, which is regarded by many Local Education Authorities and by the Authorities of many Training Colleges as giving valuable experience before the time of College training begins. These objections to the proposal would have considerable weight in ordinary times. Under present conditions, however, the Board are disposed to think that they are not sufficiently strong to outweigh the urgent need for maintaining a continuous supply of trained teachers.

4. The Board have accordingly under consideration the question of modifying their Regulations so as to make it possible for Training Colleges to admit during the period of the war any men candidates who have passed one of the ordinary qualifying Examinations and have reached the age of 17 on

APPENDIX V.

Salaries and Service of the Staff of the Day Training College 1916-7.

Day Training College.

Report to Governors on Staff Work. 21.6.1916.

	Tot.time in hrs.	Marking time in term.	Preparation in term.	Estimated minimum tot. weekly
Miss Tucker	14	-	Impossible to estimate.	-
Mr. Jackson	14	Scarcely possible to indicate.	Ceaseless and persistent.	-
Mr. White	16-17	12	-	28 to 30
Mr. Hood	15	10	-	31 exclusive of preparation.
Miss Alcock	15-20	5	15	35 to 40
Miss Taylor	12	-	12	24 to 30+
Miss Young	20			
Miss Adam			25-30	42 to 50.

Day Training College.

Staff Salaries and Service. 21st.Nov.1917.

NAME	Position	Salary on Appointment.	Present salary.	Length of Service
Miss A,Tucker B.A.	Vice Prin. Mistress of Method. Lect. in Education.	£250	£250	6yrs.
Mr.				
Mr.S,F.Jackson M.A.	Master of Method Sen.Tutor. Lect. in Education	£250	£250	4yrs.
Mr.W.Wood B.Sc.	Geography, Nature study.	£220	£230	9yrs.
Mr.H.C.White M.A.	Mathematics, Chemistry, Physics.	£180	£190	1½yrs.
* Miss E.M.Alcock M.A.	History, Physical Training.	£170	£195	5yrs.
Miss A.B.Taylor M.A.	Needlework,French, Secretarial Work, Library.	£150	£170	8yrs.
Miss M.Young.	Infant Method, Handwork.	£150	£170	7yrs.
Miss A.Pickup.	P.T. Games, Hygiene.	£60	£120	4yrs.
* Miss A.A.Williams M.A.	History	£150	£150	

* Future Principals of the College.